

**ConocoPhillips**  
76 Broadway  
Sacramento, California 95818

**RECEIVED**

11:12 am, Jan 16, 2009

Alameda County  
Environmental Health

January 6, 2009

Paresh Khatri  
Alameda County Health Agency  
1131 Harbor Bay parkway, Suite250  
Alameda, California 94502-577

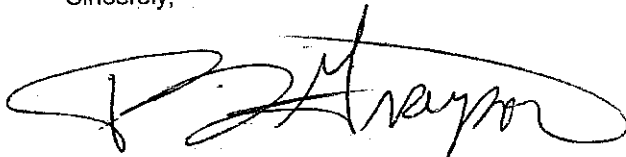
Re: ***Delineation of Vertical and Lateral Extent of Contaminant Plume***  
**76 Service Station # 6419-5748 RO # 0459**  
**6401 Dublin Blvd,**  
**Dublin, CA**

Dear Mr. Khatri:

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

If you have any questions or need additional information, please call me at (916) 558-7666.

Sincerely,



Terry L. Grayson  
Site Manager  
Risk Management & Remediation

Mr. Paresh Khatari  
Alameda County Health Agency  
Department of Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577

cc: Mr. Terry Grayson, ConocoPhillips (electronic copy)

**WORK PLAN  
FOR DELINEATION OF VERTICAL AND LATERAL  
EXTENT OF CONTAMINANT PLUME**



76 SERVICE STATION NUMBER 5748\_6419  
6401 DUBLIN BLVD  
DUBLIN, CA  
RO #459

DELTA PROJECT C105748  
January 14, 2009

Prepared for:

ConocoPhillips Company  
76 Broadway  
Sacramento, CA 95818

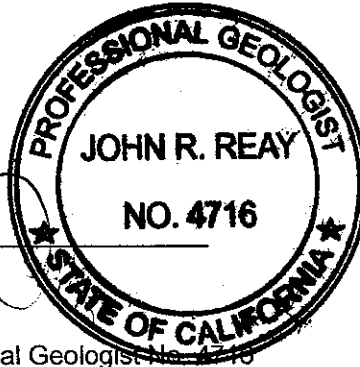
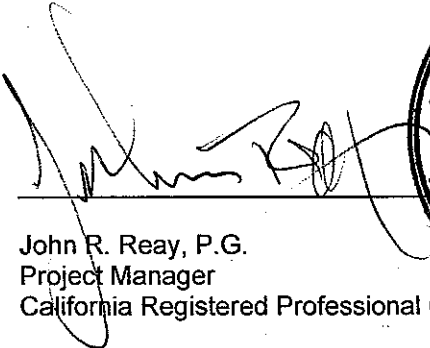
Prepared by:

Delta Consultants

**1.0 CERTIFICATION**

This report was prepared under the supervision and direction of the undersigned California Professional Geologist

**Delta Consultants**



John R. Reay, P.G.  
Project Manager  
California Registered Professional Geologist No. 4716

## TABLE OF CONTENTS

<b>1.0</b>	<b>CERTIFICATION</b> .....	<b>3</b>
<b>2.0</b>	<b>DECLARATION</b> .....	<b>4</b>
<b>3.0</b>	<b>SITE BACKGROUND AND DESCRIPTION</b> .....	<b>4</b>
3.1	SITE BACKGROUND .....	4
3.2	PREVIOUS ASSESSMENT .....	5
3.3	SENSITIVE RECEPTOR SURVEY .....	5
3.4	HYDROGEOLOGIC SITE CONDITIONS .....	5
<b>4.0</b>	<b>PRE-FIELD ACTIVITIES AND UTILITY LOCATION</b> .....	<b>5</b>
4.1	PERMITTING/HASP PREPERATION .....	5
4.2	UNDERGROUND UTILITY LOCATION .....	6
<b>5.0</b>	<b>PROPOSED CONE PENETROMETER TESTING (CPT)</b> .....	<b>6</b>
5.1	SOIL SAMPLING AND LABORATORY ANALYSIS .....	6
5.2	GROUNDWATER SAMPLING AND LABORATORY ANALYSIS .....	6
5.3	SAMPLE POINT SURVEY .....	6
5.4	DISPOSAL OF DRILL CUTTINGS AND WASTEWATER .....	7
<b>6.0</b>	<b>REPORTING</b> .....	<b>7</b>
<b>7.0</b>	<b>REMARKS</b> .....	<b>7</b>

### FIGURES

- Figure 1 – Site Location Map
- Figure 2 – Site Plan (w/ Proposed CPT Boring Locations)
- Figure 3 – Site Groundwater Rose Diagram (1994-2007)
- Figure 4 – TRC Field Monitoring Data Sheet (9/2/08)

### ATTACHMENTS

TRC *Sensitive Receptor Survey and File Review Report*, dated July 2, 2007

## 2.0 DECLARATION

On behalf of ConocoPhillips Company (COP), Delta Consultants (Delta) has prepared this *Work Plan Delineation for Vertical and Lateral Extent of Contaminant Plume* proposing the advancement of 7 Cone Penetration Test (CPT) borings to define site specific stratigraphy, depth to groundwater and facilitate collection of soil and groundwater samples at the above-referenced site.

The vertical and lateral extent of the groundwater contaminant plume, specifically with respect to MTBE, has not been fully defined at this site<sup>1</sup>. Therefore, Delta is proposing to conduct additional assessment of the site via 7 CPT borings to a depth of 60 feet below ground surface (bgs), or refusal to 1) define site specific stratigraphy, and 2) further define the vertical and lateral extent of remaining hydrocarbon impact to soil and groundwater beneath the site.

## 3.0 SITE BACKGROUND AND DESCRIPTION

### 3.1 SITE BACKGROUND

The general site location is shown on the Vicinity Map (Figure 1). The Site Map (Figure 2) illustrates the location of the current underground storage tank (UST) system which consists of two gasoline USTs with four fuel dispensers located on two dispenser islands

The USTs are located at the corner of Dublin Blvd and Dougherty Rd within a common excavation, and oriented approximately northwest-southeast. The fuel dispenser islands are covered by a canopy which is oriented at an angle to the USTs. Fuel dispenser islands are situated immediately southwest of the UST installation and south of the facility building.

September 1993 Two 10,000 gallon gasoline USTs, one 55-gallon waste oil UST, and the associated product piping were removed from the site with confirmation sampling. Groundwater was observed entering the UST excavation. Concentrations of petroleum hydrocarbons in confirmation soil samples beneath the fuel USTs were low to non-detect. Concentrations of petroleum hydrocarbons and volatile organic compounds (VOCs) in confirmation soil samples beneath the waste oil UST were low non-detect and concentrations of metals were considered background levels. Petroleum hydrocarbon and lead concentrations in confirmation soil samples from the dispenser islands were non-detect, and low, respectively. Petroleum hydrocarbon and lead concentrations in confirmation soil samples from the piping trenches were non-detect, and low, respectively.

February 1994 Three onsite monitoring wells were installed.

June 1999 Four onsite monitoring wells were installed to a depth of approximately 19 feet below ground surface (bgs).

November 1999 A four-inch diameter groundwater observation and extraction well (TPW-1) was installed in the gasoline UST pit backfill to allow purging of methyl tertiary butyl ether (MTBE) impacted groundwater.

September 2001 Two offsite monitoring wells were installed to a depth of 20 feet bgs.

October 2003 Site environmental consulting responsibilities were transferred to TRC.

December 2004 Offsite monitoring wells MW-8 and MW-9 were abandoned due to construction activities planned at those locations by Pin Brothers Fine Homes.

<sup>1</sup> ACHCS letter dated 10/16/08, subject: Fuel Leak Case No. RO0000459 and GeoTracker Global ID T0600101443, UNOCAL #6419, 6401 Dublin Boulevard, Dublin, CA 94568

January 12, 2006 Onsite monitoring wells MW-2, MW-4, MW-6, and MW-7 were abandoned at the request of the City of Dublin in anticipation of street widening on both Dougherty Road and Dublin Boulevard.

### 3.2 PREVIOUS ASSESSMENT

Previous assessment at the subject site has been limited to approximately 20 feet bgs while depth to groundwater has historically been observed to fluctuate between approximately 5 to 9 feet bgs with a strong SW flow (Figure 3). During a site visit and review conducted on 12/18/08 and based on 3<sup>rd</sup> quarter 2008 monitoring data provided by TRC, well MW-1 appears to be silted up to a sounded depth of approximately 9 feet bgs (Figure 4). The site review further found MW-2 does not appear to have been abandoned per previous reporting<sup>2</sup>. Also, the previous monitoring wells installed at this site have been screened continuously from approximately 5 feet bgs to 20 feet bgs thereby rendering depth discrete groundwater sampling and vertical plume definition impractical for this depth interval.

### 3.3 SENSITIVE RECEPTOR SURVEY

TRC completed a sensitive receptor survey on July 3, 2007 for the site (Attached). According to California Department of Water Resources (DWR) and the Zone 7 Water Agency records, four water supply wells were located within a one-half mile distance of the site. Three of the wells are listed by the Zone 7 water Agency as water supply wells and are located approximately 1,940 feet east, 2,175 feet north, and 2,070 feet northwest of the Site. One well is listed by the Zone 7 Water Agency as an abandoned water supply well and is located approximately 2,440 feet west-southwest of the Site. Three surface water bodies were identified within a one-half mile distance of the Site. San Ramon Creek is located approximately 2,145 feet northwest of the site, and unnamed canal is located approximately 625 feet southwest of the Site, and the Chabot Canal is located approximately 1,650 feet east of the Site. Copies of referenced and available well logs on file with DWR were not provided in this TRC report. This work will be conducted by Delta and made available in future reporting per ACHCS letter dated 10/16/08.

### 3.4 HYDROGEOLOGIC SITE CONDITIONS

The site is underlain to a maximum investigated depth of approximately 20 feet bgs by clay (CL to CH) and silts (ML to MH) with thin discontinuous stringers of silty to poorly graded sand (SM to SP). Lenses of gravelly or sandy material are found from 3 to 8 feet bgs. However, MW-7 demonstrates sandy lenses (SM to SW) at depths of between 10 to 20 feet bgs.

## 4.0 PRE-FIELD ACTIVITIES AND UTILITY LOCATION

### 4.1 PERMITTING/HASP PREPERATION

Drilling permits will be obtained for the boring and the monitoring wells as necessary from the appropriate parties prior to commencing field work. Delta will prepare a Health and Safety Plan (HASP) specific to the site and work being performed in accordance with Title 8, Section 5192 of the California Code of Regulations. This will contain a list of emergency contacts, as well as hospital route maps to the nearest emergency facility and Occupational Health Center, and will be reviewed daily by field personnel.

<sup>2</sup> TRC report dated 2/17/06 subject "WELL ABANDONMENT REPORT 76 SERVICE STATION NO. 6419 (5748), 6401 DUBLIN BOULEVARD DUBLIN, CALIFORNIA"

## 4.2 UNDERGROUND UTILITY LOCATION

The proposed boring locations will be marked in the field prior to drilling, and Underground Services Alert (USA) will be contacted at least 48 hours prior to initiating drilling to minimize the risk of damaging underground utilities. A private utility locator will also be retained to survey the locations and further minimize the risk of damaging underground utilities. Additionally, an air-knife vacuum truck will be used to clear the proposed boring and monitoring well locations to a depth of at least 5 feet bgs prior to drilling.

## 5.0 PROPOSED CONE PENETROMETER TESTING (CPT)

To refine subsurface stratigraphy and to obtain an initial determination of the lateral and vertical extent of petroleum hydrocarbons that may remain in the soil and groundwater beneath the site, it is proposed that CPT borings be advanced at seven locations (Figure 2) to approximately 60 feet bgs or refusal. A maximum of thirty soil samples will be collected from field selected depths CPT borings, along with three groundwater grab sample from each boring. Soil samples will be collected from significant sands or at significant changes in lithology based on real-time interpretation of CPT analysis. Non-disposable sampling equipment will be decontaminated between samples in a non-phosphate detergent and double rinsed with potable water or steam cleaned as appropriate. Following sample collection push neat cement grout will be pumped through the push rods as they are extracted from the borehole affecting borehole abandonment.

### 5.1 SOIL SAMPLING AND LABORATORY ANALYSIS

Soil samples will be collected for laboratory analysis at field selected depths based on CPT log analysis. A pre-calibrated photo-ionization detector (PID) will be used to field screen soil samples for the presence of organic vapors. Discrete soil samples retained for analysis will be capped with Teflon sheeting and tight-fitting plastic end caps, properly labeled with a unique identification number, placed in an ice-chilled cooler, and transported to a California-certified analytical laboratory with chain of custody documentation. Soil samples will be analyzed for TPHg, TPHd by EPA Method 8015M, benzene, toluene, ethylbenzene, toluene, xylenes, methyl tertiary butyl ether (MTBE), ethyl tertiary butyl ether (ETBE), di-isopropyl ether (DIPE), tertiary amyl methyl ether (TAME), tert butyl alcohol (TBA), ethylene dibromide (EDB), ethylene dichloride (EDC) and ethanol by EPA Method 8260.

### 5.2 GROUNDWATER SAMPLING AND LABORATORY ANALYSIS

Groundwater grab samples will be collected from all CPT borings from field selected depth discrete intervals based on CPT logs. The groundwater samples will be placed into laboratory supplied sample bottles labeled with a unique identification number. The samples will then be placed into an ice-chilled cooler and transported to a California-certified analytical laboratory with chain of custody documentation. Groundwater samples will be analyzed for TPHg, TPHd by EPA Method 8015M, benzene, toluene, ethylbenzene, toluene, xylenes, methyl tertiary butyl ether (MTBE), ethyl tertiary butyl ether (ETBE), di-isopropyl ether (DIPE), tertiary amyl methyl ether (TAME), tert butyl alcohol (TBA), ethylene dibromide (EDB), ethylene dichloride (EDC) and ethanol by EPA Method 8260.

### 5.3 SAMPLE POINT SURVEY

Following the completion of the sampling event, a California licensed surveyor will survey the northing and easting of the CPT boring locations using Datum NGVD29 or NAD 88. A global positioning system (GPS) will also be used to survey in the latitude and longitude of the wells to be uploaded into California's GeoTracker database system. The survey of the well locations will be to sub-meter accuracy.

## 5.4 DISPOSAL OF DRILL CUTTINGS AND WASTEWATER

Drill cutting, purge and decontamination water generated during the sampling event will be placed into properly labeled 55-gallon Department of Transportation (DOT) approved steel drums and temporarily stored on the property. Samples of the drill cuttings and wastewater will be collected, properly labeled and placed on ice for submittal to a California-certified laboratory and analyzed for TPHg, TPHd by EPA Method 8015M, benzene, toluene, ethylbenzene, toluene, xylenes, methyl tertiary butyl ether (MTBE), ethyl tertiary butyl ether (ETBE), di-isopropyl ether (DIPE), tertiary amyl methyl ether (TAME), tert butyl alcohol (TBA), ethylene dibromide (EDB), ethylene dichloride (EDC) and ethanol by EPA Method 8260. A chain-of-custody will accompany the samples during transportation to the laboratory. Subsequent to receiving the laboratory analytical results, the drummed drill cuttings and wastewater will be profiled, transported, and disposed of at a ConocoPhillips (COP) approved facility.

## 6.0 REPORTING

Anticipated schedule of work includes:

- 1<sup>st</sup> Q 09: Workplan submitted to ACEH
- 2<sup>nd</sup> Q 09: Comments to workplan received from ACEH
- Proceed with field work within 90 days of receipt of ACEH comments
- Following completion of the field work and receipt of analytical results, a site investigation report will be prepared and submitted within 60 days. The report will present the details of the boring activities, including copies of boring permits, and details of disposal activities and copies of disposal documents. Required electronic submittals will be uploaded to the State Geotracker and Alameda County databases.

## 7.0 REMARKS

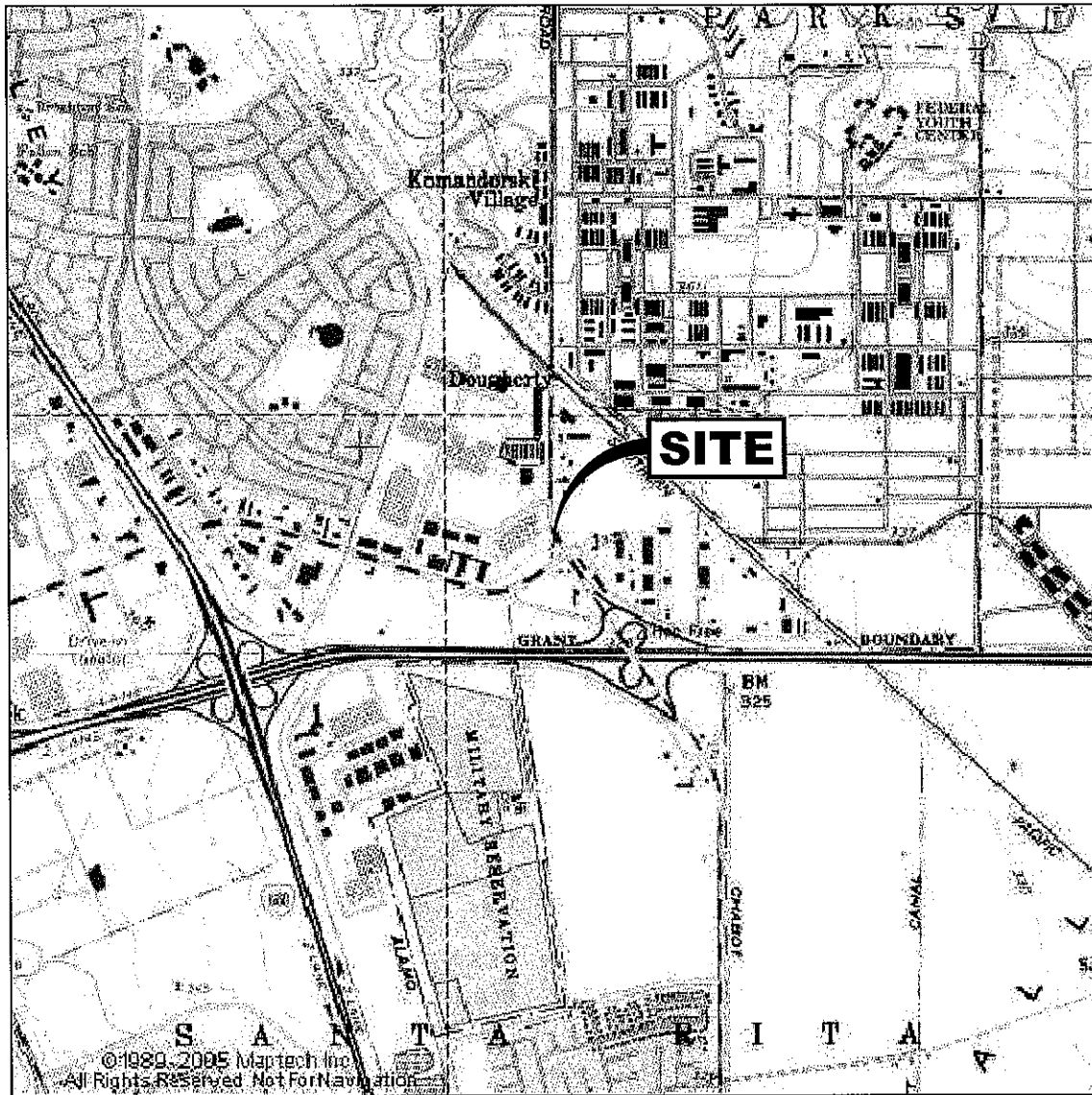
The recommendations contained in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report will be performed. This report is intended only for the use of Delta's Client and anyone else specifically listed on this report. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this report. If you have questions regarding this report, please contact John Reay at (916) 503-1260 or Terry Grayson at 916-558-7666.

Sincerely,

**DELTA CONSULTANTS**



## FIGURES



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, DUBLIN (1998) QUADRANGLE

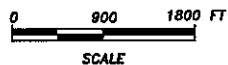


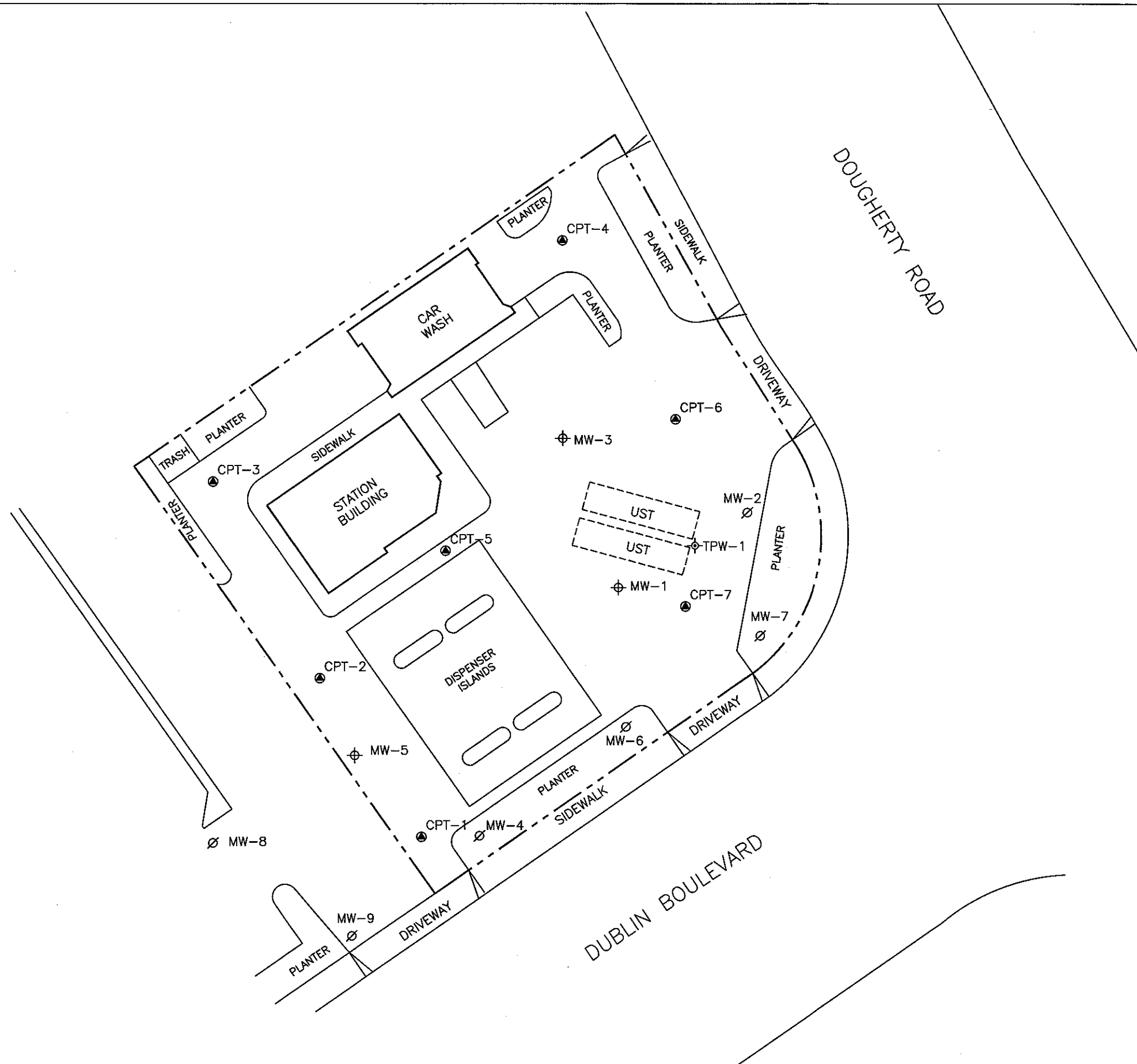
FIGURE 1

SITE LOCATION MAP

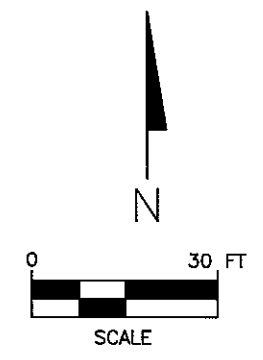
76 SERVICE STATION NO. 6419 (5748)  
6401 DUBLIN BOULEVARD  
DUBLIN, CALIFORNIA

PROJECT NO. C105748	DRAWN BY DR 12/31/08
FILE NO. 5748-SiteLocator	PREPARED BY JH
REVISION NO.	REVIEWED BY EC





- LEGEND:**
- APPROXIMATE PROPERTY BOUNDARY
  - ⊕ MONITORING WELL
  - ∅ ABANDONED MONITORING WELL
  - ⊕ UST BACKFILL WELL
  - PROPOSED CPT BORING

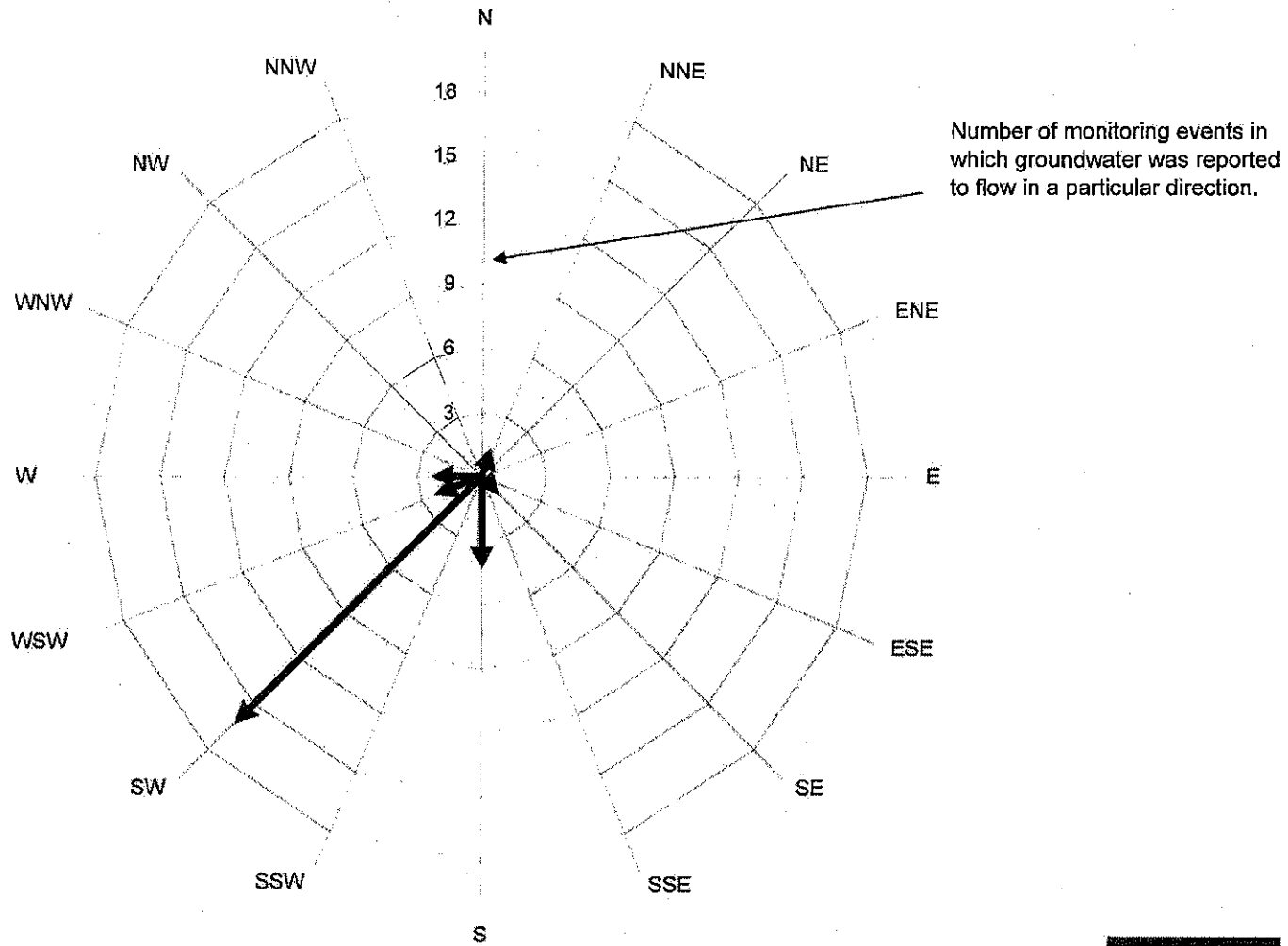


**FIGURE 2  
SITE PLAN**

76 SERVICE STATION NO. 6419 (5748)  
6401 DUBLIN BOULEVARD  
DUBLIN, CALIFORNIA

PROJECT NO. C105748	PREPARED BY AB	DRAWN BY JH	
DATE 12/31/08	REVIEWED BY JR	FILE NAME 76-5748	

**Historical Groundwater Flow Directions  
for Tosco (76) Service Station No. 6419  
September 1994 through June 2007**



**Figure 3**





**ATTACHMENTS**



ConocoPhillips Company  
76 Broadway  
Sacramento, CA 95818  
phone 916-558-7600  
fax 916-558-7639

July 3, 2007

Mr. Barney Chan  
Supervising Hazardous Materials Specialist  
Alameda County Environmental Health Services  
1131 Harbor Bay Parkway  
Alameda, California 94502

RE: Sensitive Receptor Survey and File Review  
TRC Project No. 126071  
Dated: July 2, 2007

76 Service Station no. 6419  
6401 Dublin Boulevard  
Dublin, California

Dear Mr. Chan,

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

Please feel free to contact me if you have any questions or require additional information.

Respectfully,

A handwritten signature in black ink that reads "Bill Borgh". The signature is written in a cursive, slightly slanted style.

Bill Borgh  
Site Manager – Risk Management and Remediation

Attachment



1590 Solano Way  
#A  
Concord, CA 94520

925.688.1200 PHONE  
925.688.0388 FAX

www.TRCSolutions.com

July 2, 2007

TRC Project No. 126071

Mr. Barney Chan  
Hazardous Materials Specialist  
Alameda County Health Care Services  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577

RE: Sensitive Receptor Survey and File Review Report  
76 Service Station #6419  
6401 Dublin Boulevard  
Dublin, California

Dear Mr. Chan:

On behalf of ConocoPhillips Company (ConocoPhillips), TRC has prepared this sensitive receptor survey report for 76 Service Station #6419, located at 6401 Dublin Boulevard (Site) in Dublin, California (Figure 1). In addition, TRC reviewed recent files on the Former BP Station #11120 located at located at 6400 Dublin Boulevard, approximately 100 feet southeast of the Site.

### **SCOPE OF WORK**

To identify public and municipal wells within one-half mile radius of the Site, TRC contacted the California Department of Water Resources (DWR) and the Zone 7 Water Agency (Alameda County Flood Control and Water Conservation District) to obtain copies of well completion reports for any wells located in the Site vicinity. The results, excluding destroyed water supply wells and groundwater monitoring and extraction wells, are summarized in Table 1 and shown on Figure 1.

Also included in the survey was an evaluation of nearby surface water bodies as possible sensitive receptors. TRC accomplished this by observing various site and vicinity maps. Figure 1 shows the nearby surface water bodies located within a one-half mile radius of the Site.

A file review of Former BP Station #11120 located at 6400 Dublin Road was also conducted for purposes of plume delineation confirmation. The results are discussed below.

### **SENSITIVE RECEPTOR SURVEY**

A request was made to the DWR and to the Zone 7 Water Agency for well completion reports within the vicinity of the site. Of the well completion reports reviewed, four water supply wells were located within a one-half mile radius of the Site (Table 1).



Wells 1, 2, and 3 are listed by the Zone 7 Water Agency as water supply wells and are located approximately 1,940 feet east, 2,175 feet north, and 2,070 feet northwest of the Site, respectively. Well 4 is listed by the Zone 7 Water Agency as an abandoned water supply well and is located approximately 2,440 feet west-southwest of the Site. More specific information regarding the use of the above-listed wells was unavailable. However, the existing construction details for these wells are provided in Table 1.

Three surface water bodies were identified within a one-half mile radius of the Site. San Ramon Creek is located approximately 2,145 feet northwest of the site, an unnamed canal is located approximately 625 feet southwest of the Site, and Chabot Canal is located approximately 1,650 feet east of the Site.

Groundwater at the Site is encountered at an average depth of approximate 8 feet below grade and flows to the west at an average hydraulic gradient of 0.01 feet per foot (Semi-Annual Monitoring Report dated April 23, 2007). However, historical groundwater flow has varied from the south to the west.

## **FILE REVIEW**

A file review of Former BP Station #11120 was performed. Former BP Station #11120 is an open leaking fuel case site that is located approximately 100 feet southeast and downgradient of the Site. Selected documents obtained during the file review are included in Appendix A.

Based on historical groundwater monitoring data for the Former BP Station # 11120 from 1993 to 1997, the groundwater flow had been predominantly to the southwest, but has varied significantly from west to east-southeast.

A total of ten monitoring wells were installed and monitoring on the former BP Station. The most upgradient wells on the former BP Station that could provide some indication of downgradient migration of the MTBE plume at the 76 Station No. 6419 (the Site) would be wells MW-5, MW-6, and MW-9. Wells MW-5 and MW-6 were monitored quarterly between 1992 and 1998. Well MW-9 was monitored quarterly between 2002 and 2006. Figures showing the monitoring well locations and hydrocarbon and MTBE concentrations in the BP Station wells during the November 2006 monitoring event are included in Attachment A.

Total petroleum hydrocarbons as gasoline (TPH-g), and benzene, toluene, ethylbenzene, and total xylenes (BTEX) have never been detected above laboratory reporting limits in BP wells MW-5, MW-6 and MW-9, and methyl tertiary butyl ether (MTBE) was only detected once in well MW-5, during the September 1996 monitoring event, at a concentration of 27 micrograms per liter ( $\mu\text{g}/\text{l}$ ) and never detected in MW-6. MTBE concentrations in MW-9 ranged from non-detect to a maximum concentration of 33  $\mu\text{g}/\text{l}$  in December 2003. TPH-g and BTEX were not detected above laboratory reporting limits in either well.

The groundwater plume on the former BP station is centered around and downgradient of the former USTs. Maximum MTBE groundwater concentrations reported in well at that location during between 1993 and 1999 were 37,000  $\mu\text{g}/\text{l}$  (9/6/95), 12,000  $\mu\text{g}/\text{l}$  (9/6/95), and 2,200  $\mu\text{g}/\text{l}$  (9/16/97), in abandoned monitoring wells MW-3, MW-4, and MW-7, respectively. Maximum TPH-g concentrations were 18,000  $\mu\text{g}/\text{l}$ , 9,200  $\mu\text{g}/\text{l}$ , and 650  $\mu\text{g}/\text{l}$ , respectively.



During the final quarterly groundwater monitoring event conducted in September 2006 at the BP Station, MTBE concentrations of 130 µg/l and 26 µg/l were reported in site well MW-8 and MW-11, respectively. TPH-g concentrations in these wells were 82 µg/l and non-detect, respectively.

## CONCLUSIONS

### File Review

The groundwater monitoring data for the Former BP Station #11120 implies that the Site groundwater plume does not extend offsite as far as BP Station.

BP well MW-6 is located directly south of the Site. Based on the established groundwater flow direction at the Site, MW-6 is the most likely BP Station well in which groundwater impacts from the Site would be detected. No contaminants were detected in MW-6, which implies that the Site plume had not spread onto BP Station #11120 before the well was abandoned in 1999.

Furthermore, BP Station wells MW-5 and MW-9, also located along the northern property boundary and within the potential flow direction for Site groundwater, had only reported non-detect to very low concentrations of MTBE. Based on the fact that MTBE concentrations in the southernmost Site wells have generally very low and because BP wells MW-5 and MW-9 are located southeast of the Site and are therefore not in the direct path of the Site groundwater flow (to the southwest), it is likely that the very low concentrations of MTBE detected historically in BP Station wells MW-5 and MW-9 are the result of lateral dispersion of historical releases that occurred at BP Station #11120 and are not the result of a migration of MTBE-impacted groundwater from the Site.

### Sensitive Receptor Survey

Wells 1, 2, and 3 are not located within the path of the local groundwater flow and are therefore not considered potential sensitive receptors. Well 4 is located within the path of local groundwater flow, however, based on the distance to the well from the Site of 2,240 feet, it is unlikely to be impacted by the Site hydrocarbon plume, and is therefore not considered a potential sensitive receptor.

The Chabot Canal is not located within the path of local groundwater flow and is therefore not considered a potential sensitive receptor.

San Ramon Creek and the unnamed canal are located within the path of local groundwater flow. However, based on the distance to San Ramon Creek of 2,145 feet and the distance to the unnamed canal of 625 feet, and based on the current and historical groundwater concentrations onsite, both San Ramon Creek and the unnamed canal are unlikely to be impacted by the Site hydrocarbon plume and are therefore not considered potential sensitive receptors.

No other current or potential sensitive receptors were identified within a one-half mile radius of the Site.



If you have any questions or concerns regarding this information, please contact Keith Woodburne at 925-688-2488.

Sincerely,



Monika Krupa  
Staff Scientist

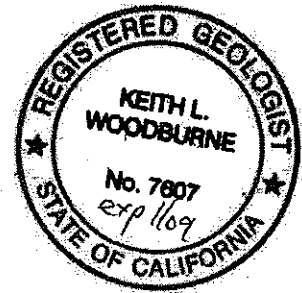


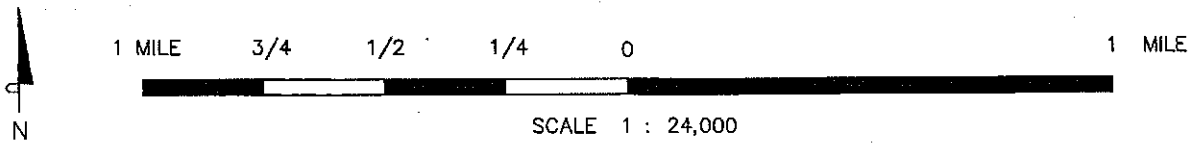
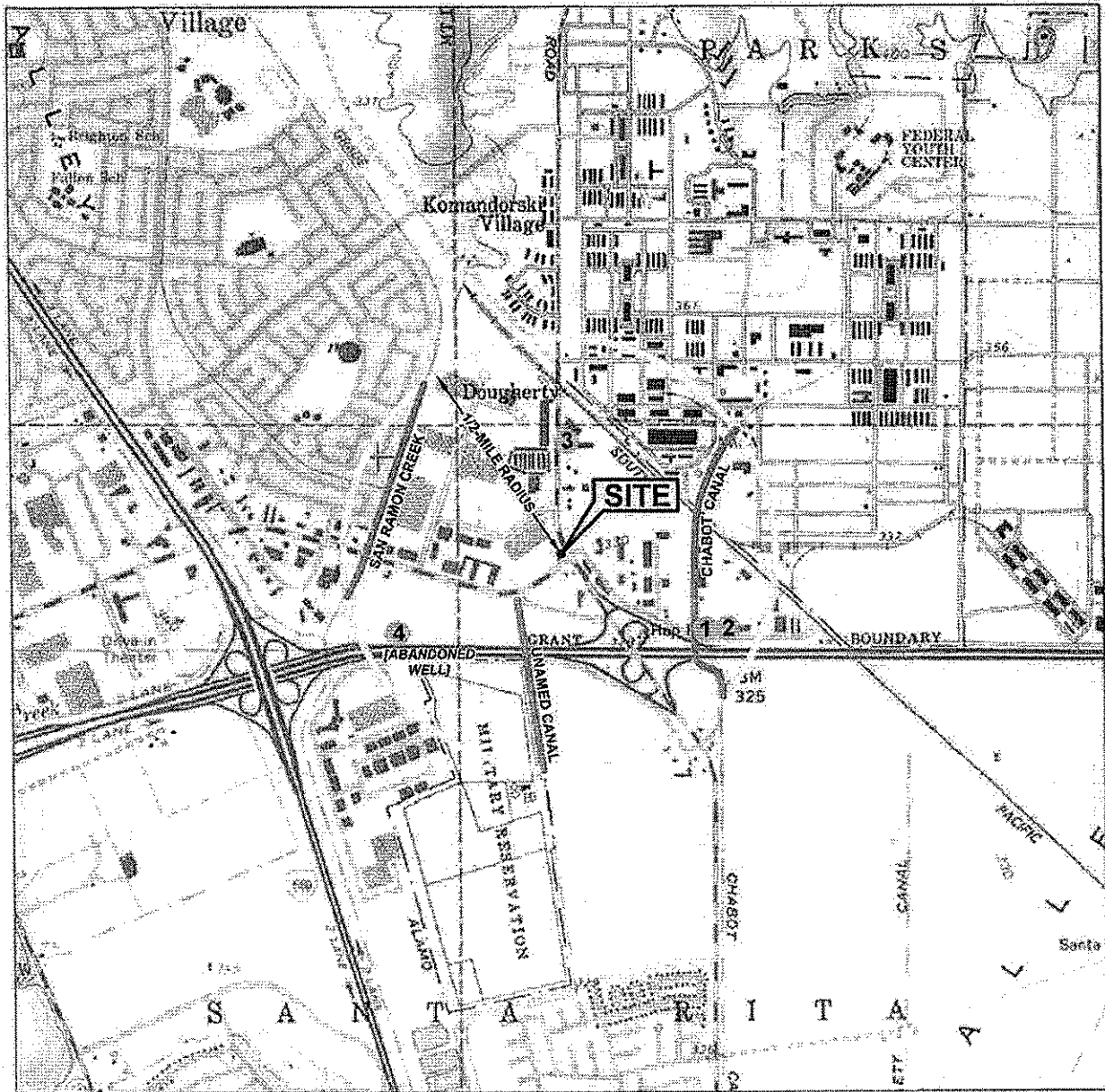
Keith Woodburne, P.G.  
Senior Project Manager

Attachments:

Figure 1 - Sensitive Receptors within a One-Half Mile Radius of Site  
Table 1 - Summary of Well Information  
Appendix A- File Review Documents

cc: Bill Borgh, ConocoPhillips (electronic upload only)

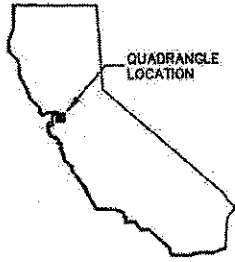




SOURCE:  
 United States Geological Survey  
 7.5 Minute Topographic Maps:  
 Dublin Quadrangle, California

**LEGEND**

① Water Supply Well



**SENSITIVE RECEPTORS WITHIN  
 1/2-MILE RADIUS OF SITE**

76 Service Station #6419 (5748)  
 6401 Dublin Boulevard  
 Dublin, California

**TABLE 1**  
**SUMMARY OF WELL INFORMATION**

76 Service Station # 6419  
6401 Dublin Boulevard  
Dublin, California

TRC Well Number	Owner	Well Use	Well Total Depth (fbg)	Screened Interval (ft)	Depth to Water (fbg)	Date Installed	Approximate Distance From Site (ft)	Direction from Site
1	Bay Automotive	Water Supply	192	180-186	NA	11/7/1962	1,940	SE
2	Security Storage	Water Supply	305	285-292	NA	4/8/1971	2,175	SE
3	American Freight Lines	Water Supply	65	NA	NA	NA	1,475	N
4	Frank Terra	Water Supply	35	NA	NA	NA	2,240	WSW

Notes: NA = Not Available  
fbg = feet below grade

**APPENDIX A**  
**FILE REVIEW DOCUMENTS**



Atlantic Richfield Company  
(a BP affiliated company)

P.O. Box 1257  
San Ramon, CA 94583  
Phone: (925) 275-3801  
Fax: (925) 275-3815



December 20, 2006

Re: Evaluation Residual MTBE, Review Historic Gradient,  
and Conduit and Sensitive Receptor Survey Report  
Former BP Station #11120  
6400 Dublin Boulevard  
Dublin, California  
ACEH Case #RO0002431

"I declare, that to the best of my knowledge at the present time, that the information and/or  
recommendations contained in the attached document are true and correct."

Submitted by:

Paul Supple  
Environmental Business Manger



Atlantic Richfield Company  
(a BP affiliated company)

P.O. Box 1257  
San Ramon, CA 94583  
Phone: (925) 275-3801  
Fax: (925) 275-3815



December 20, 2006

Re: Evaluation Residual MTBE, Review Historic Gradient,  
and Conduit and Sensitive Receptor Survey Report  
Former BP Station #11120  
6400 Dublin Boulevard  
Dublin, California  
ACEH Case #RO0002431

"I declare, that to the best of my knowledge at the present time, that the information and/or  
recommendations contained in the attached document are true and correct."

Submitted by:

Paul Supple  
Environmental Business Manger



A BP affiliated company



**Evaluation Residual MTBE, Review Historic Gradient, and  
Conduit and Sensitive Receptor Survey Report**

Former BP Station #11120  
6400 Dublin Road  
Dublin, California

Prepared for

Mr. Paul Supple  
Environmental Business Manager  
Atlantic Richfield Company  
P.O. Box 1257  
San Ramon, California 94583

Prepared by



1324 Mangrove Avenue, Suite 212  
Chico, California 95926  
(530) 566-1400  
[www.broadbentinc.com](http://www.broadbentinc.com)

December, 2006

Project No. 06-02-651

Broadbent & Associates, Inc.  
1324 Mangrove Ave., Suite 212  
Chico, CA 95926  
Voice (530) 566-1400  
Fax (530) 566-1401



December 20, 2006

Project No. 06-02-651

Atlantic Richfield Company  
P.O. Box 1257  
San Ramon, CA 94583  
Submitted via ENFOS

Attn.: Mr. Paul Supple

Re: Evaluation Residual MTBE, Review Historic Gradient, and Conduit and Sensitive Receptor Survey Report, former BP Station 11120 (herein referred to as Station 11120), located at 6400 Dublin Boulevard., Dublin, California. ACEH Case No. RO0002431

Dear Mr. Supple:

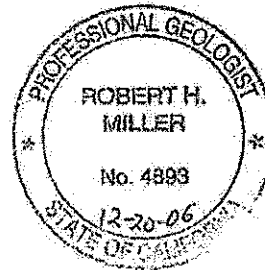
Broadbent & Associates, Inc. is pleased to submit this Technical Report for Station 11120 located at 6400 Dublin Boulevard, Dublin, California (Property). This Report was completed as required by Alameda County Environmental Health (ACEH) in their letter dated November 6, 2006 and includes an evaluation of residual Methyl tert-butyl ether (MTBE) on the Property, a review historic ground-water gradient, and a conduit and sensitive receptor survey.

If you have any questions concerning this Report, please do not hesitate to contact us at (530) 566-1400.

Sincerely,  
BROADBENT & ASSOCIATES, INC.

Matthew G. Herrick, P.G.  
Project Hydrogeologist

Robert H. Miller, P.G., C.H.G.  
Principal Hydrogeologist



cc: Mr. Barney Chan, Alameda County Environmental Health (Submitted via ACEH ftp site)  
Ms. Shelby Lathrop, ConocoPhillips (Submitted via WebXtender)  
Geotracker

## **I. INTRODUCTION**

This Technical Report was completed as required by ACEH in their letter dated November 6, 2006. The ACEH requested that additional information be provided to progress Station 11120 to closure. The additional information provided in this Report includes an evaluation of residual MTBE, a review of historic ground-water gradient, and a conduit and sensitive receptor survey.

## **II. BRIEF HISTORY**

In October 1992, four on-site ground-water monitoring wells (MW-1 through MW-4) were installed to obtain baseline data in support of BP's plans to divest the Property (HETI, 1992). Petroleum hydrocarbons were detected in soil and ground-water samples collected from MW-3 and MW-4. In April 1993, three additional monitor wells (MW-5 through MW-7) were installed in addition to soil boring LB-1 (HETI, 1993). In October 1994, two soil borings (TB-1 and TB-2) were installed on behalf of TOSCO Oil Company for compliance with Alameda County Flood Control District requirements (EMCON, 1995).

In 1996, the underground storage tanks (USTs) were replaced and MW-1 was destroyed to facilitate UST system upgrades and replacement of the service station building (Alisto Engineering Group, 2002). Ground-water monitoring began on the Property in October 1992 and continued through June 1998. In February 1999, wells MW-2 through MW-7 were destroyed (Alisto Engineering Group, 1999) and it is our understanding that case closure was granted.

In May 1999, two on-site soil borings HP-1 and HP-2 were installed by Tosco Oil Company (Gettler-Ryan Inc., 1999). Elevated concentrations of MTBE were detected in the grab ground-water samples collected from HP-1 and HP-2. It is our understanding that, following the installation of HP-1 and HP-2, the case was re-opened by the ACEH as a result of MTBE concentrations in ground water.

Monitor wells MW-8 through MW-11 were installed in 2002. With the exception of MW-9 (abandoned earlier this year to facilitate road widening work), these wells have all been included in the monitoring program through the present. Drawing 1 depicts a site map which includes the location of the above mentioned monitor wells and soil borings that have been installed on the Property since 1992.

## **III. EVALUATION RESIDUAL MTBE**

An evaluation of residual MTBE was completed in both soil and ground water as requested under technical comment #1 in the November 6, 2006 ACEH letter.

### *Evaluation Residual MTBE in Soil*

Soil samples collected in investigations conducted in 1992 (MW-1 through MW-4), 1993 (MW-5 through MW-7 and LB-1), and 1994 (TB-1 and TB-2) were not analyzed for MTBE. Soil samples were not collected in 1999 during the installation of soil borings HP-1 and HP-2.

Soil samples were collected and analyzed for MTBE during the installation of wells MW-8 through MW-11 in 2002. MTBE was only detected in MW-11 (0.048 mg/kg) at a depth of 6 to 6.5 feet below land surface (bls) (Alisto Engineering Group, 2002).

#### *Evaluation Residual MTBE in Ground Water*

To evaluate residual MTBE in ground water, drawings were prepared which show the maximum MTBE concentration detected in ground water and the respective date the concentration was detected.

Appendix A includes historical ground-water analytical data for wells monitored for the time period 1992 through 1998. MTBE was not included in laboratory analysis for ground-water samples from the Property until 1993. Drawing 2 provides maximum MTBE concentrations in ground water from 1993 through 1999 (time period covers through installation of HP-1 and HP-2). As shown in Drawing 2, elevated MTBE concentrations were detected in three of the seven wells: MW-3 at 37,000 µg/L and MW-4 at 12,000 µg/L, both located in the general vicinity of the former USTs, and MW-7 at 2,200 µg/L located on the southwestern portion of the property. Elevated concentrations of MTBE were also detected in the grab ground-water samples collected from HP-1 (4,800 µg/L) and HP-2 (22,000 µg/L) located to the south of the former USTs.

Table 1 includes a summary of ground-water monitoring data including relative water elevations and laboratory analysis for wells monitored during the time period 2002 through present. Drawing 3 provides maximum MTBE concentrations in ground water for this time period. As shown in Drawing 3, MTBE at an elevated concentration has only been detected in MW-11 to the south of the former underground fuel tanks at 3,500 µg/L.

#### **IV. REVIEW HISTORIC GROUND-WATER GRADIENT**

A review of the historic ground-water gradient was completed as requested under technical comment #2 in the November 6, 2006 ACEH letter. Table 2 lists historical ground-water flow direction and gradient data and includes a rose diagram for the time period 1993 through 1997. Ground-water flow direction and gradient data for the one sampling event that was completed in 1992 and 1998 could not be located and are not included in Table 2. As indicated in Table 2, the ground-water flow direction for this period varied significantly with the predominant direction towards the southwest. The gradient magnitude ranged from 0.001 to 0.01 during this period.

Table 3 lists historical ground-water flow direction and gradient data and includes a rose diagram for the time period 2002 through the present. As indicated in Table 3, the ground-water flow direction for this period varied from the east-southeast, moving in the clockwise direction, to the west with the predominant direction towards the southeast. The gradient magnitude for this time period ranged from 0.003 to 0.042.

## V. CONDUIT AND SENSITIVE RECEPTOR SURVEY

A conduit and sensitive receptor survey was completed as requested under technical comment #3 in the November 6, 2006 ACEH letter. The conduit survey was completed to examine the potential for conduits to cause preferential flow of impacted ground water from the Property. The sensitive receptor survey was completed to survey all wells (monitoring and production wells: active, inactive, standby, destroyed (sealed with concrete), abandoned (improperly destroyed); and dewatering, drainage, and cathodic protection wells) within a ½ mile radius of the Property and to examine if any of these wells could potentially be affected by petroleum hydrocarbon impacted ground-water from Station 11120.

### *Conduit Survey*

Maps from the City of Dublin Public Works Department, Dublin San Ramon Services District (DSRSD), and Pacific Gas and Electric (PG&E) were reviewed to evaluate the potential for conduits to cause preferential flow of impacted ground water from the Property. The utilities that were located during the review are shown in Drawing 4. It is important to note that a number of utilities have been or are going to be relocated in the general vicinity of the Property as a result of the road widening at the intersection of Dublin Boulevard and Dougherty Road. Because only low concentrations of petroleum hydrocarbons remain on the Property in ground water, we are only interested in the location of utilities prior to any recent or planned relocation.

As shown in Drawing 4, numerous underground utilities run along Dublin Boulevard to the north of the Property including a storm drain, fiber optic line, water, sanitary sewer, telephone, natural gas, and three separate joint trenches. A joint trench consist of a single trench that is shared by a number of different utilities. Along Dougherty Road to the north of the Dougherty Road Dublin Boulevard intersection a storm drain, water, sanitary sewer, telephone, and natural gas line are present. Only a single fiber optic line was located along Dougherty Road directly east of the Property. A sanitary sewer line and water line were located directly south of the Property. Both these lines terminate approximately 500 feet south of Property where they intersect water and sewer lines that run east west along Dublin Court.

The City of Dublin Public Works Department could not provide depth to the bottom of utilities and backfill material used to fill the trenches (native or non-native). The DSRSD stated that water lines should have been installed at a minimum of 4 feet bls and sewer lines a minimum of 5 feet bls with both lines most likely not to exceed a total depth of 10 feet. Backfill material for utilities was not provided by the DSRSD. PG&E did not provide depth to the bottom of utilities or backfill material used to fill trenches.

The potential depth of utility conduits found in the area surrounding the property range from 1 to 10 feet bls. Depth to ground water from monitor wells on the Property has historically ranged from 4.0 feet bls to 8.91 feet bls. Based on this information, it is possible that utility conduits could have provided preferential paths for the flow of impacted ground water from the Property. However, only two utilities, a water line and a sewer line, were located to the south of the Property in the general down gradient direction of historic ground-water flow.

### *Sensitive Receptor Survey*

Well logs were requested from the California Department of Water Resources (DWR) to complete the sensitive receptor survey. The wells that were determined to be within a ½ mile radius of the Property are shown in Drawing 5 with well details presented in Table 4. A total of 80 wells were identified within the ½ mile survey radius of the Property (six test wells, 60 monitor wells, 11 abandoned wells, one cathodic protection well, and two wells listed with a well type of unknown). No domestic or municipal wells were located within the ½ mile radius. However, the exact location of two wells with an unknown well type and one domestic well was not provided and therefore could not be determined.

Wells that were located in the immediate vicinity of Station 11120 include the following: five monitor wells and an abandoned well at two separate locations to the north and directly across Dublin Boulevard from the Property, 11 monitor wells and a test well at three separate locations at distances of approximately 500 to 1,000 feet to the southeast of the Property, and a single monitor well located approximately 600 feet to the south-southeast of the Property. Although not included in the well logs received from the California DWR, we are aware of another site (Dublin Toyota Car Dealership) with monitor wells that are located approximately 600 feet to the south-southwest from Station 11120. Upon reviewing reports available in GeoTracker, it is our understanding that there are 10 monitor wells at the Dublin Toyota Car Dealership associated with a petroleum hydrocarbon release at this site.

Based on low concentrations of petroleum hydrocarbons that remain at Station 11120, predominant historic gradient directions, and distance from Station 11120 it is unlikely that any of the above wells have been affected by petroleum hydrocarbon impacted ground-water from Station 11120.

## **VI. DISCUSSION AND RECOMMENDATIONS**

MTBE was first detected in ground water on the Property on August 25, 1993 in wells MW-3 (3,300 µg/L) and MW-4 (2,100 µg/L). This was also the first time MTBE was included in a laboratory analysis from ground-water samples collected on the Property. Wells MW-3 and MW-4 are located in the general vicinity of the location of the former USTs which is believed to be the source area of MTBE.

As stated above, the predominant ground-water flow direction from the time period 1993 through 1997 was toward the southwest. The MTBE plume was considered defined during this time period to the south, southeast, north and northwest directions from the source area as MTBE was never detected in wells MW-1, MW-2, and MW-6 and only detected on one occasion in MW-5 at 27 µg/L (9/19/1997). MTBE concentrations in MW-7, to the southwest and predominant downgradient direction of the source area, varied significantly with concentrations ranging from below laboratory detection levels to 2,200 µg/L (9/16/1997) during this period.

During the time period 2002 through the present the predominant ground-water flow direction was toward the southeast. Wells MW-8, MW-9, and MW-10, all located on the corners of the Property, are considered to adequately define the MTBE ground-water plume during this

period. MTBE concentrations in MW-10, located to the southeast and predominant downgradient direction of the source area, have been very low with concentrations ranging from below laboratory detection levels to 2.8 µg/L (9/30/02).

Only two utilities were found to be located to the south of the Property and in the general downgradient direction from the source area. It is possible, but not probable, that these utility conduits could have provided preferential paths for the flow of petroleum hydrocarbon impacted ground water. Based on the concentrations of MTBE detected in wells located on the southerly portion of the Property, it is unlikely that concentrations at significant levels could have reached these utilities. As stated above, it is unlikely that any wells located in the sensitive receptor survey could be affected by petroleum hydrocarbon impacted ground-water from Station 11120.

The ACEH letter dated November 6, 2006 stated that the purpose of completing this Technical Report was to provide additional information to progress Station 11120 to closure. Based on the findings above, it is recommended that a formal closure request be completed and submitted to the ACEH for review.

## VII. CLOSURE

The findings presented in this report are based upon: data collected by previous consultants for Atlantic Richfield Company, the points investigated, and data provided by the City of Dublin Public Works Department, Dublin San Ramon Services District, PG&E, and the California DWR. Our services were performed in accordance with the generally accepted standard of practice at the time this report was written. No other warranty, expressed or implied was made. This report has been prepared for the exclusive use of Atlantic Richfield Company. It is possible that variations in soil or ground-water conditions could exist beyond points explored in this investigation. Also, changes in site conditions could occur in the future due to variations in rainfall, temperature, regional water usage, or other factors.

## ATTACHMENTS:

- Drawing 1. Site Map, Station #11120, Dublin CA
- Drawing 2. Maximum MTBE Concentrations in Ground Water (1993-1999), Station #11120, Dublin CA
- Drawing 3. Maximum MTBE Concentrations in Ground Water (2002-Present), Station #11120, Dublin CA
- Drawing 4. Utility Map, Station #11120, Dublin, CA
- Drawing 5. Site Vicinity Map with Well Search Radius, Station #11120, Dublin, CA
  
- Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses, Station #11120, Dublin CA
- Table 2. Historic Ground-Water Flow Direction and Gradient (1993-1997), Station #11120, Dublin CA
- Table 3. Historic Ground-Water Flow Direction and Gradient (2002-Present), Station #11120, Dublin CA

Table 4. Summary of Wells Identified Within Area of Review, Station #11120, Dublin CA

Appendix A. Historical Ground-Water Analytical Data (1992-1998)  
(Source: Alisto Engineering)

**REFERENCES:**

Alisto Engineering Group, 1999. Well Destruction Report, Former BP Site No. 11120, 6400 Dublin Boulevard, Dublin, California, March 5.

Alisto Engineering Group, 2002. Site Investigation Report, Former BP Site No. 11120, 6400 Dublin Boulevard, Dublin, California, May 20.

EMCON, 1995. Supplemental Site Investigation, BP Station 11120, 6400 Dublin Boulevard, Dublin, California, February 14.

Gettler-Ryan Inc., 1999. Limited Subsurface Investigation Report, Tosco 76 Branded Facility No. 11120, 6400 Dublin Boulevard, Dublin, California, June 16.

HETI, 1992. Preliminary Site Assessment Report, BP Service Station No. 11120, 6400 Dublin Boulevard, Dublin, California, January 7.

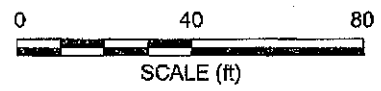
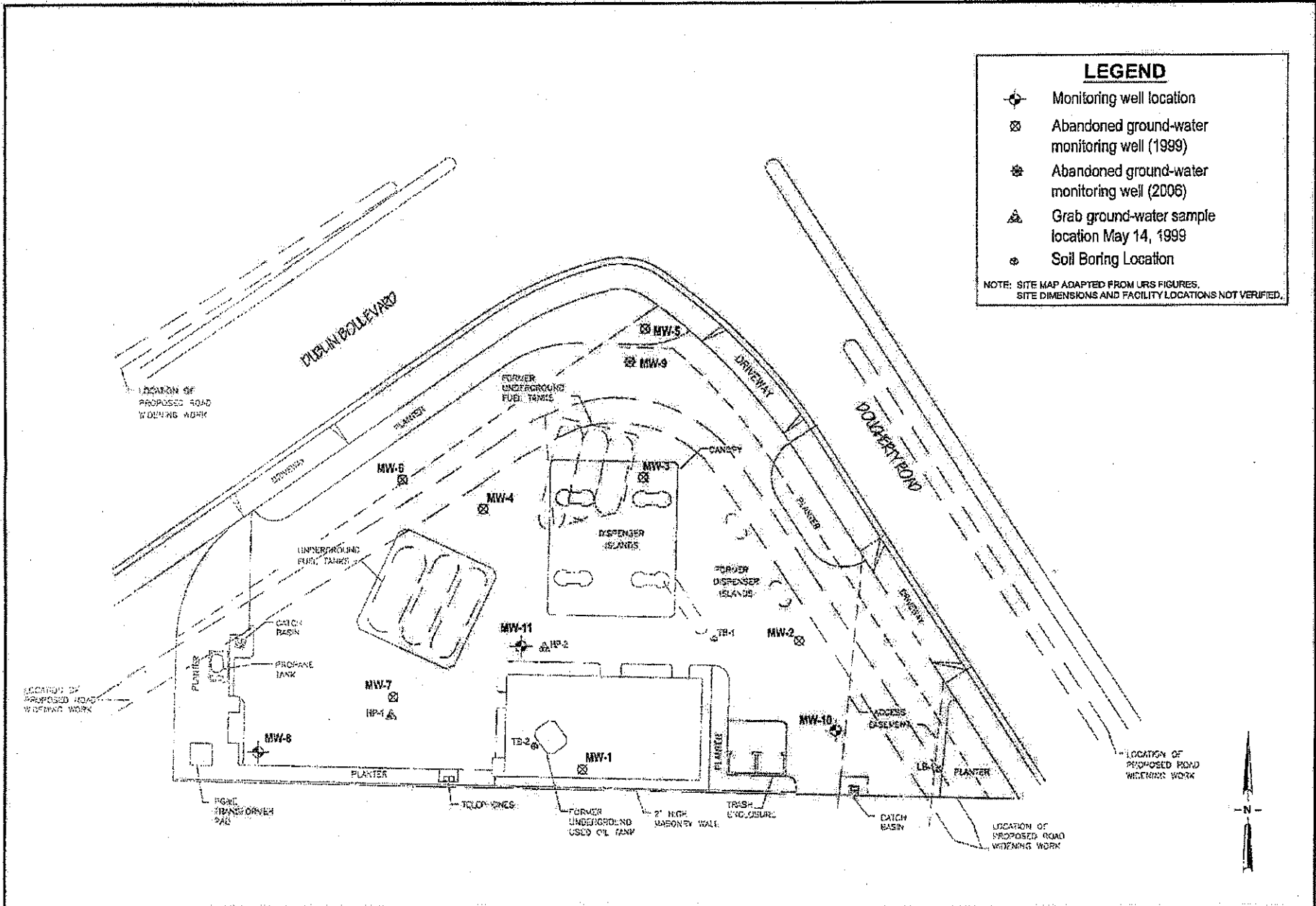
HETI, 1993. Preliminary Site Assessment Report, BP Service Station No. 11120, 6400 Dublin Boulevard, Dublin, California, May 20.



**LEGEND**

- ⊕ Monitoring well location
- ⊗ Abandoned ground-water monitoring well (1999)
- ⊗ Abandoned ground-water monitoring well (2006)
- △ Grab ground-water sample location May 14, 1999
- ⊙ Soil Boring Location

NOTE: SITE MAP ADAPTED FROM URS FIGURES.  
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.



**BROADBENT & ASSOCIATES, INC.**  
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL  
1324 Mangrove Ave. Suite 212, Chico, California 95925  
Project No.: 06-02-651 Date: 11/20/06

Former BP Station #11120  
6400 Dublin Boulevard  
Dublin, California

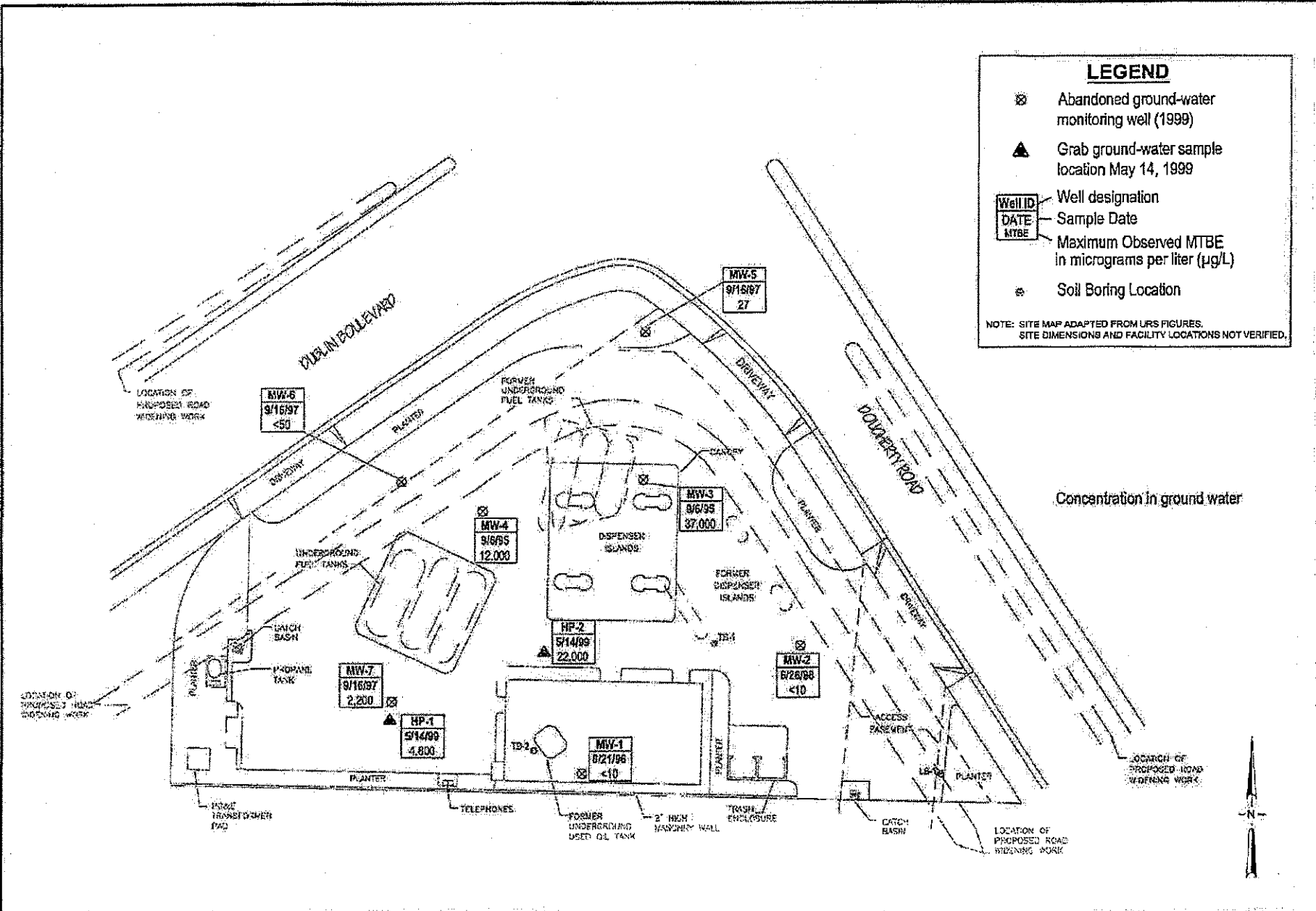
Site Map

Drawing  
**1**

**LEGEND**

- ⊗ Abandoned ground-water monitoring well (1999)
- ▲ Grab ground-water sample location May 14, 1999
- Well ID: Well designation
- DATE: Sample Date
- MTBE: Maximum Observed MTBE in micrograms per liter (µg/L)
- ⊙ Soil Boring Location

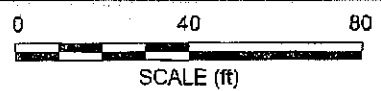
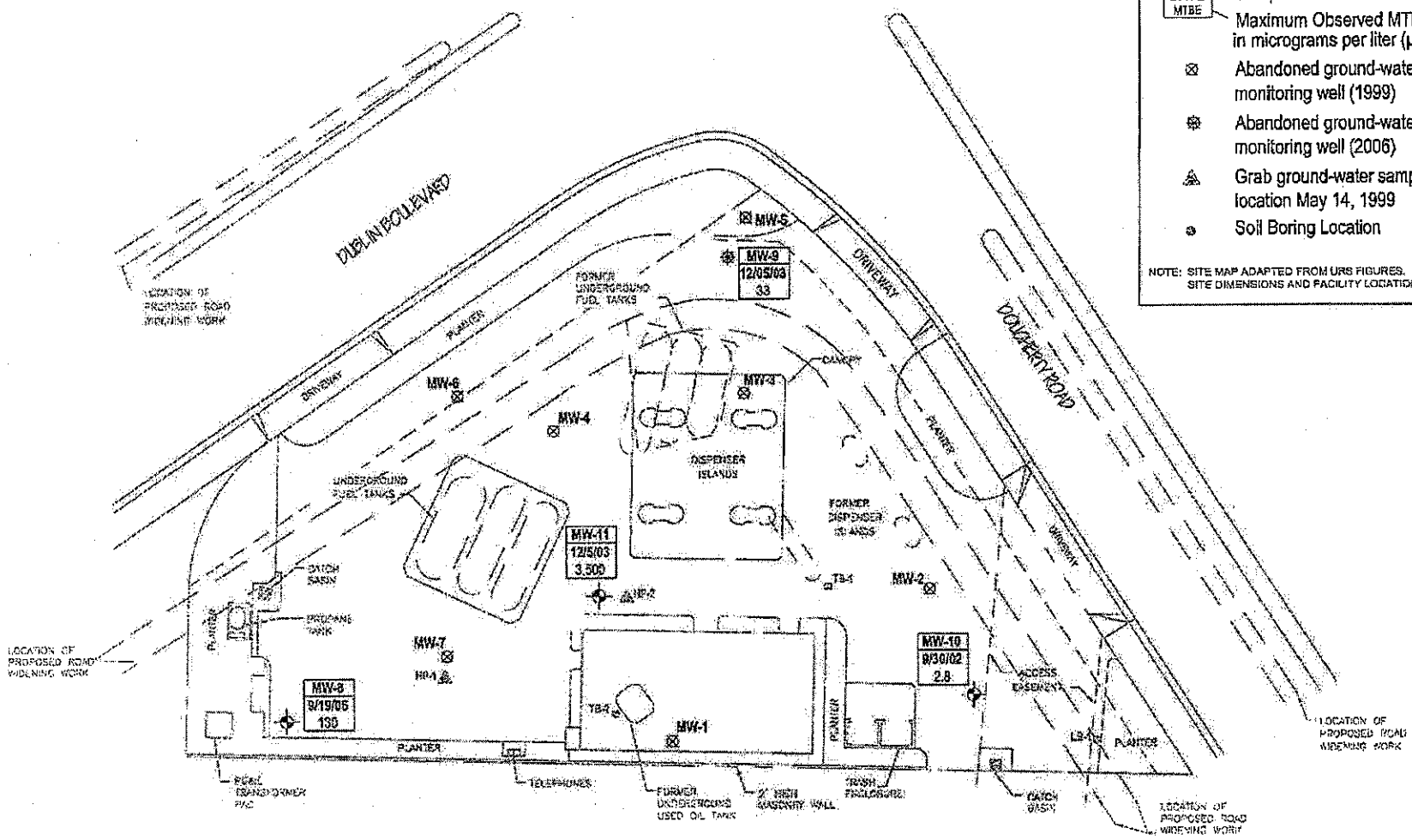
NOTE: SITE MAP ADAPTED FROM URS FIGURES. SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.



### LEGEND

- ⊕ Monitoring well location
- Well ID  
DATE  
MTBE  
Maximum Observed MTBE in micrograms per liter (µg/L)
- ⊗ Abandoned ground-water monitoring well (1999)
- ⊕ Abandoned ground-water monitoring well (2006)
- ⊕ Grab ground-water sample location May 14, 1999
- ⊙ Soil Boring Location

NOTE: SITE MAP ADAPTED FROM URS FIGURES.  
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

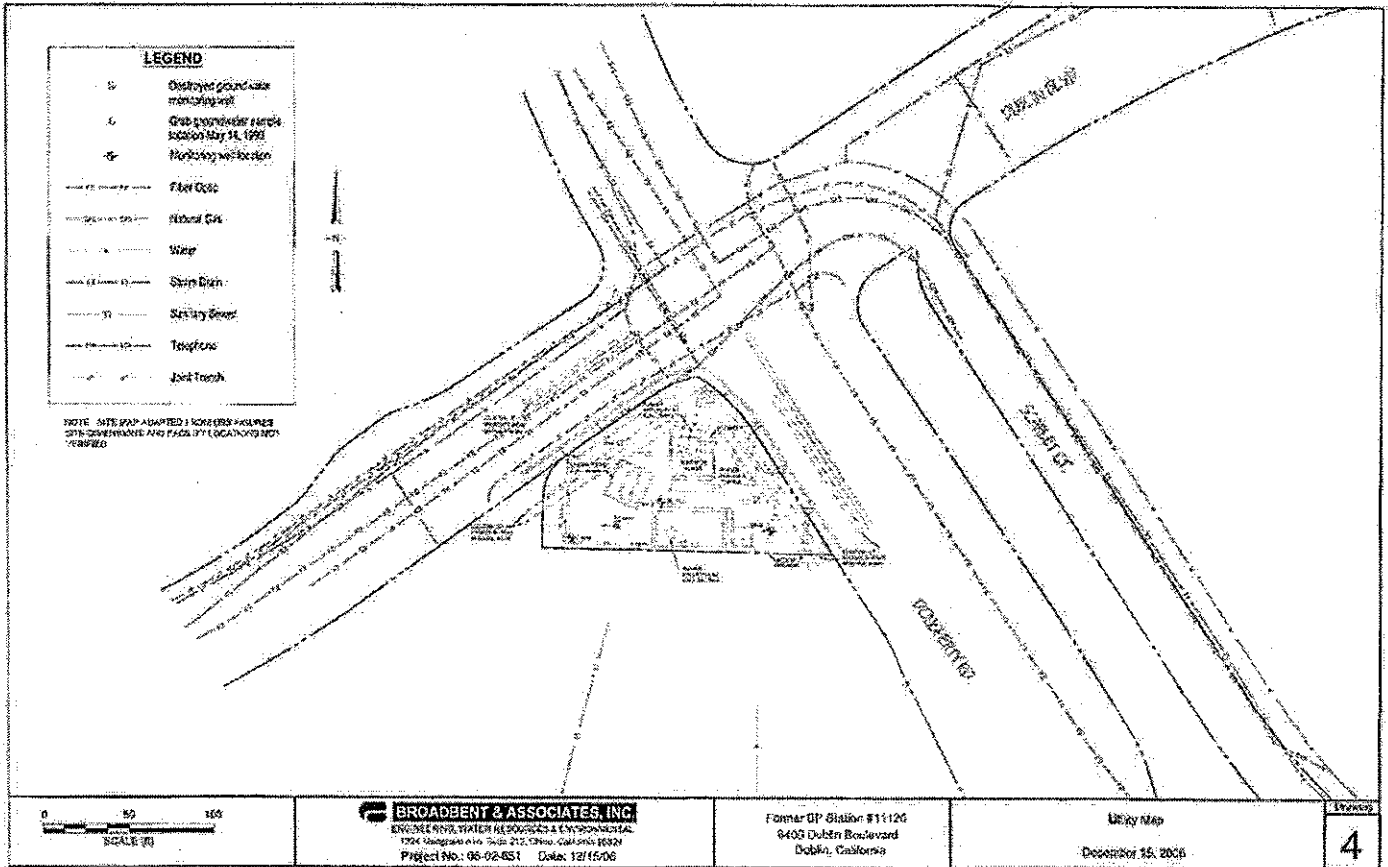


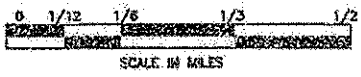
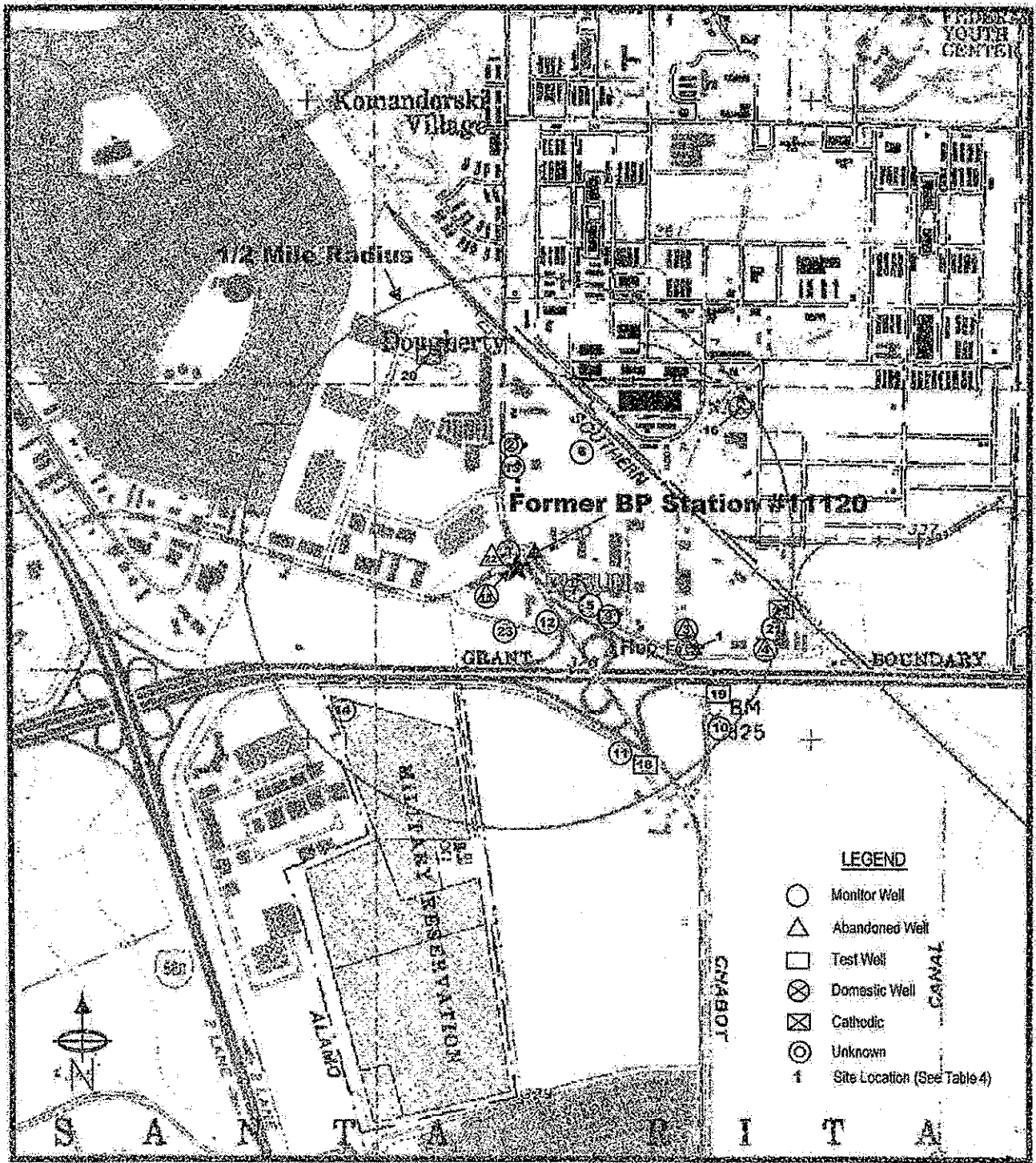
**BROADBENT & ASSOCIATES, INC.**  
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL  
1324 Mangrove Ave. Suite 212, Chico, California 95928  
Project No.: 06-02-651 Date: 11/20/06

Former BP Station #11120  
6400 Dublin Boulevard  
Dublin, California

Maximum MTBE Concentrations  
in Ground Water (2002-Present)

Drawing  
**3**





Site Vicinity Map with Well Search Radius  
Former BP Station #11120  
Dublin, California

Drawing No. 5

Project No. 06-02-651

Prepared by: DAW Approved by: MGH Date: 12/8/06

**BROADBENT & ASSOCIATES, INC.**  
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses  
Station #11120, 6400 Dublin Blvd., Dublin, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)					MTBE	(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes					
<b>MW-8</b>															
02/25/2002	--	328.94	6.02	--	322.92	<50	<0.5	<0.5	<0.5	<0.5	1.98	--	PACE	--	
09/30/2002	--	328.94	6.16	--	322.78	<50	<0.5	<0.5	<0.5	<0.5	2.9/4.8	--	SEQM	--	a
12/13/2002	--	328.94	5.81	--	323.13	<50	<0.5	<0.5	<0.5	<0.5	5.9/6.4	--	SEQM	--	a
03/12/2003	--	328.94	5.8	--	323.14	<50	<0.50	<0.50	<0.50	<0.50	4.3/3.8	--	SEQM	--	
06/28/2003	--	328.94	5.7	--	323.24	<50	<0.50	<0.50	<0.50	<0.50	4.1	--	SEQM	--	b
09/30/2003	--	328.94	5.9	--	323.04	<50	<0.50	<0.50	<0.50	<0.50	4.1	--	SEQM	--	
12/05/2003	P	328.94	5.89	--	323.05	<50	<0.50	<0.50	<0.50	<0.50	6.7	--	SEQM	7.2	
03/10/2004	P	328.94	4.74	--	324.20	<50	<0.50	<0.50	<0.50	<0.50	5.1	--	SEQM	6.7	
06/21/2004	P	328.94	6.12	--	322.82	<50	<0.50	<0.50	<0.50	<0.50	7.5	--	SEQM	7.0	
09/17/2004	P	328.94	6.38	--	322.56	<50	<0.50	<0.50	<0.50	<0.50	6.6	--	SEQM	7.2	
12/13/2004	P	328.94	5.47	--	323.47	<50	<0.50	<0.50	<0.50	<0.50	6.7	--	SEQM	6.8	
03/03/2005	P	328.94	4.43	--	324.51	<50	<0.50	<0.50	<0.50	<0.50	5.6	--	SEQM	6.9	
06/10/2005	P	328.94	5.35	--	323.59	<50	<0.50	<0.50	<0.50	<0.50	6.2	--	SEQM	6.9	
09/16/2005	P	328.94	6.58	--	322.36	<50	<0.50	<0.50	<0.50	<0.50	5.7	--	SEQM	6.9	
12/15/2005	P	328.94	8.54	--	320.40	<50	<0.50	<0.50	<0.50	<0.50	2.6	--	SEQM	7.0	
03/01/2006	P	328.94	7.55	--	321.39	<50	<0.50	<0.50	<0.50	<0.50	2.8	--	SEQM	7.1	
6/23/2006	P	328.94	8.14	--	320.80	<50	<0.50	<0.50	<0.50	<0.50	35	--	TAMC	7.2	
9/19/2006	P	328.94	7.33	--	321.61	82	<1.0	<1.0	<1.0	<1.0	130	--	TAMC	7.2	c
<b>MW-9</b>															
02/25/2002	--	329.96	5.9	--	324.06	<50	<2.50	<2.50	<2.50	<5.00	<2.50	--	PACE	--	
09/30/2002	--	329.96	6.92	--	323.04	<50	<0.5	<0.5	<0.5	<0.5	1.4/3.3	--	SEQM	--	a
12/13/2002	--	329.96	6.51	--	323.45	<50	<0.5	<0.5	<0.5	<0.5	0.53/<2.5	--	SEQM	--	a
03/12/2003	--	329.96	6.86	--	323.1	<50	<0.50	<0.50	<0.50	<0.50	0.59/<2.5	--	SEQM	--	
06/28/2003	--	329.96	5.95	--	324.01	<50	<0.50	<0.50	<0.50	<0.50	1.0	--	SEQM	--	b
09/30/2003	--	329.96	6.24	--	323.72	<50	<0.50	<0.50	<0.50	<0.50	16	--	SEQM	--	
12/05/2003	P	329.96	7.21	--	322.75	<50	<0.50	<0.50	<0.50	<0.50	33	--	SEQM	7.6	
03/10/2004	P	329.96	5.37	--	324.59	<50	<0.50	<0.50	<0.50	<0.50	2.4	--	SEQM	7.1	
06/21/2004	P	329.96	6.67	--	323.29	<50	<0.50	<0.50	<0.50	<0.50	1.6	--	SEQM	7.8	
09/17/2004	P	329.96	7.89	--	322.07	<50	<0.50	<0.50	<0.50	<0.50	0.72	--	SEQM	7.5	
12/13/2004	P	329.96	5.22	--	324.74	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.6	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses  
 Station #11120, 6400 Dublin Blvd., Dublin, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-9 Cont.															
03/03/2005	P	329.96	5.12	--	324.84	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.6	
06/10/2005	P	329.96	5.90	--	324.06	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.5	
09/16/2005	P	329.96	6.99	--	322.97	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.6	
12/15/2005	P	329.96	8.52	--	321.44	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.7	
03/01/2006	P	329.96	8.06	--	321.90	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.7	
6/23/2006	P	329.96	8.56	--	321.40	<50	<0.50	<0.50	<0.50	<0.50	1.1	--	TAMC	7.3	
MW-10															
02/25/2002	--	327.44	4.21	--	323.23	53	2.58	<0.5	2.83	8.46	<0.5	--	PACE	--	
09/30/2002	--	327.44	4.71	--	322.73	<50	<0.5	<0.5	<0.5	<0.5	0.51/2.8	--	SEQM	--	a
12/13/2002	--	327.44	6.36	--	321.08	<50	<0.5	<0.5	<0.5	<0.5	<0.5/<2.5	--	SEQM	--	a
03/12/2003	--	327.44	7.96	--	319.48	<50	<0.50	<0.50	<0.50	<0.50	0.76/<2.5	--	SEQM	--	
06/28/2003	--	327.44	7.7	--	319.74	<50	<0.50	<0.50	<0.50	<0.50	0.68	--	SEQM	--	b
09/30/2003	--	327.44	7.57	--	319.87	<50	<0.50	<0.50	<0.50	<0.50	0.71	--	SEQM	--	
12/05/2003	P	327.44	6.64	--	320.80	<50	<0.50	<0.50	<0.50	<0.50	0.78	--	SEQM	7.1	
03/10/2004	P	327.44	5.20	--	322.24	<50	<0.50	<0.50	<0.50	<0.50	0.58	--	SEQM	6.4	
06/21/2004	P	327.44	7.45	--	319.99	<50	<0.50	<0.50	<0.50	<0.50	1.1	--	SEQM	7.0	
09/17/2004	P	327.44	7.49	--	319.95	<50	<0.50	<0.50	<0.50	<0.50	0.82	--	SEQM	7.0	
12/13/2004	P	327.44	5.19	--	322.25	<50	<0.50	<0.50	<0.50	<0.50	0.73	--	SEQM	6.8	
03/03/2005	P	327.44	4.86	--	322.58	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	6.9	
06/10/2005	P	327.44	4.00	--	323.44	<50	<0.50	<0.50	<0.50	<0.50	1.2	--	SEQM	6.8	
09/16/2005	P	327.44	4.78	--	322.66	<50	<0.50	<0.50	<0.50	<0.50	0.98	--	SEQM	6.9	
12/15/2005	P	327.44	6.67	--	320.77	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.0	
03/01/2006	P	327.44	5.67	--	321.77	<50	<0.50	<0.50	<0.50	<0.50	0.59	--	SEQM	7.1	
6/23/2006	P	327.44	5.83	--	321.61	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	TAMC	7.0	
9/19/2006	P	327.44	6.87	--	320.57	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	TAMC	7.1	
MW-11															
02/25/2002	--	329.75	6.02	--	323.73	1,800	1.34	<0.5	<0.5	<1.0	2,550	--	PACE	--	
09/30/2002	--	329.75	7.12	--	322.63	<50	<0.5	<0.5	<0.5	<0.5	1,500/1,400	--	SEQM	--	a
12/13/2002	--	329.75	6.60	--	323.15	1,300	<10	<10	<10	<10	1,400/2,000	--	SEQM	--	a

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11120, 6400 Dublin Blvd., Dublin, CA

Well and Sample Date	PNP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)					MTBE	(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes					
MW-11 Cont.															
03/12/2003	--	329.75	5.79	--	323.96	<500	<5.0	<5.0	<5.0	<5.0	650/2,900	--	SEQM	--	
06/28/2003	--	329.75	5.68	--	324.07	<5,000	<50	<50	<50	<50	2,500	--	SEQM	--	b
09/30/2003	--	329.75	6.68	--	323.07	5,100	<25	<25	<25	<25	3,200	--	SEQM	--	
12/05/2003	P	329.75	6.69	--	323.06	<5,000	<50	<50	<50	<50	3,500	--	SEQM	7.2	
03/10/2004	P	329.75	5.29	--	324.46	3,000	<25	<25	<25	<25	1,800	--	SEQM	6.8	
06/21/2004	P	329.75	6.65	--	323.10	<5,000	<50	<50	<50	<50	1,900	--	SEQM	7.1	
09/17/2004	P	329.75	7.02	--	322.73	<2,500	<25	<25	<25	<25	1,700	--	SEQM	7.1	
12/13/2004	P	329.75	6.01	--	323.74	650	<5.0	<5.0	<5.0	<5.0	610	--	SEQM	6.9	
03/03/2005	P	329.75	5.13	--	324.62	250	<2.5	<2.5	<2.5	<2.5	190	--	SEQM	7.0	c
06/10/2005	P	329.75	6.00	--	323.75	<100	4.1	<1.0	<1.0	<1.0	100	--	SEQM	7.0	
09/16/2005	P	329.75	7.24	--	322.51	<100	<1.0	<1.0	<1.0	<1.0	52	--	SEQM	7.0	
12/15/2005	P	329.75	8.91	--	320.84	<50	<0.50	<0.50	<0.50	<0.50	9.0	--	SEQM	7.1	
03/01/2006	P	329.75	8.05	--	321.70	<50	<0.50	<0.50	<0.50	<0.50	21	--	SEQM	7.2	
6/23/2006	P	329.96	8.65	--	321.10	<50	<0.50	<0.50	<0.50	<0.50	23	--	TAMC	7.2	
9/19/2006	P	329.96	8.07	--	321.89	<50	<0.50	<0.50	<0.50	<0.50	26	--	TAMC	7.3	



ABBREVIATIONS AND SYMBOLS:

TOC = Top of casing in ft MSL.  
DTW = Depth to water in ft bgs  
GWE = Groundwater elevation in ft MSL  
GRO = Gasoline range organics  
TPH-g = Total petroleum hydrocarbons as gasoline  
MTBE = Methyl tert butyl ether by EPA method 8021B (prior to 6/28/03) or 8260B  
DO = Dissolved oxygen  
µg/L = Micrograms per liter  
mg/L = Milligrams per liter  
< = Not detected at or above laboratory reporting limit  
-- = Not sampled/applicable/analyzed/measured  
PACE = Pace, Inc.  
SEQM = Sequoia Analytical Laboratory  
TAMC = TestAmerica  
P/NP = Well purged/not purged prior to sampling  
ft bgs = Feet below ground surface  
ft MSL = Feet above mean sea level

FOOTNOTES:

a = Analyzed by EPA method 8260 B; fuel oxygenates include ethanol, tert-butyl alcohol, di-isopropyl ether, ethyl tert-butyl ether, tert-amyl methyl ether; lead scavengers include: 1,2-dichloroethane & ethylene dibromide.  
b = Beginning on the second quarter 2003 monitoring event (6/28/03), TPH-g, benzene, toluene, ethylbenzene, total xylenes, MTBE and fuel oxygenates analyzed by EPA method 8260B.  
c = The hydrocarbon result for GRO was partly due to individual peaks in the quantitative range.

NOTES:

TOC elevations surveyed relative to an elevation of 18.409 ft MSL.

Beginning in the fourth quarter 2003, the laboratory modified the reported analyte list. TPH-g was changed to GRO. The resulting data may be impacted by the potential inclusion of non-TPH-g analytes within the requested fuel range resulting in a higher concentration being reported.

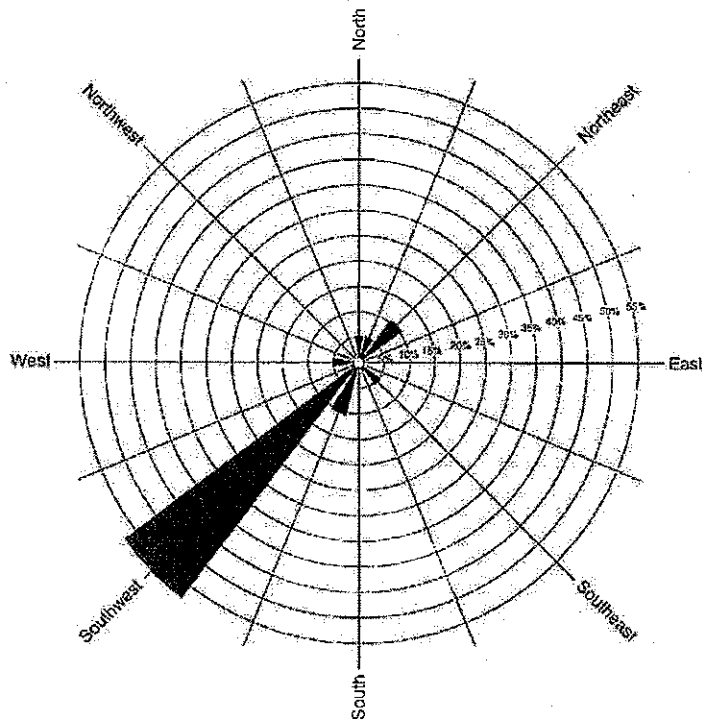
Beginning in the second quarter 2004, the carbon range for GRO was changed from C6-C10 to C4-C12.

Note: The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information.

**Table 2. Historical Ground-Water Flow Direction and Gradient (1993 to 1997)**  
**Former BP Station #11120, 6400 Dublin Boulevard, Dublin, CA**

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
8/25/1993	Southwest	0.002
11/22/1993	Southwest	0.002
5/7/1994	South-Southwest	0.002
6/9/1994	Southwest	0.003
9/12/1994	Southwest	0.002
12/20/1994	Southwest	0.004
5/16/1995	Southwest	0.003
6/28/1995	West	0.005
9/6/1995	Southwest	0.002
12/22/1995	Southwest	0.005
3/20/1996	West-Southwest	0.004
10/31/1996	Southwest	0.002
6/26/1996	Southeast	0.01
12/2/1996	Northeast	0.01
3/27/1997	Northeast and Southwest	0.007 to 0.01
6/3/1997	North-Northeast	0.008
9/16/1997	North and Southeast	0.004 to 0.009

Note: The data within this table was taken from Potentiometric Groundwater Elevation Contour Maps completed by Alisto Engineering Group. Broadbent & Associates, Inc. has not verified the accuracy of this information.

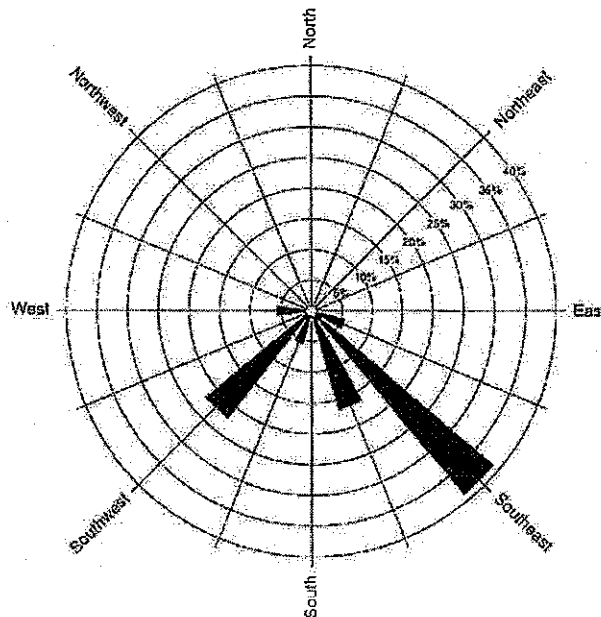


**Table 3. Historical Ground-Water Flow Direction and Gradient (2002 to Present)**

**Former BP Station #11120, 6400 Dublin Boulevard, Dublin, CA**

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
9/25/2002	South	0.009
9/30/2002	South-Southeast	0.004
12/15/2002	Southeast	0.022
3/12/2003	Southeast	0.04
6/23/2003	Southeast	0.042
9/30/2003	Southeast	0.042
12/5/2003	South-Southeast	0.036
3/10/2004	Southeast	0.021
6/27/2004	Southeast	0.034
9/17/2004	Southeast	0.027
12/13/2004	South-Southeast	0.02
3/3/2005	South-Southwest	0.02
6/10/2005	Southwest	0.004
9/16/2005	Southwest	0.004
12/15/2005	Southwest	0.007
6/23/2006	West	0.004
3/17/2006	Southwest	0.003
9/19/2006	East-Southeast	0.012

Note: The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information.



**Table 4**  
**Summary of Wells Identified Within Area of Review**  
**Station #11120, 6400 Dublin Road, Dublin, CA**

Site Map Location	State Well I.D.	Well Location	Date Drilled	Well Type	Total Depth (ft. bgs)	Screened Interval (ft. bgs)
1a	3S/1E 6G7	6055 Scarlett Ct	12/09/88	Abandoned	14	9-14
1b	3S/1E 6G8	6055 Scarlett Ct	05/24/89	Monitor	15	5-15
1c	3S/1E 6G9	6055 Scarlett Ct	05/24/89	Monitor	15	5-15
1d	3S/1E 6G10	6055 Scarlett Ct	05/24/89	Monitor	10	5-10
1e	3S/1E 6G11	6055 Scarlett Ct	05/25/89	Monitor	15	5-15
1f	3S/1E 6G12	6055 Scarlett Ct	05/24/89	Abandoned	15	5-15
1g	3S/1E 6G13	6055 Scarlett Ct	05/25/89	Monitor	15	5-15
2a	2S/1E 3UJ1	Southwest Corner of Armory Parcel	05/13/91	Unknown	45	27-45
2b	2S/1E 3UJ2	Northwest Corner of Armory Parcel	05/13/91	Unknown	60	41-60
3a	3S/1E 6G25	6085 Scarlett Ct	03/10/92	Abandoned	19.5	3.5-19.5
3b	3S/1E 6G	6085 Scarlett Ct	01/30/95	Monitor	20	5-20
4a	3S/1E 6G17	5787 Scarlett Ct	01/22/90	Abandoned	15	8-15
4b	3S/1E 6G18	5787 Scarlett Ct	01/22/90	Monitor	15	8-15
4c	3S/1E 6G19	5787 Scarlett Ct	01/22/90	Monitor	15	7-15
4d	3S/1E 6G20	5787 Scarlett Ct	01/23/90	Monitor	19	7-19
5a	3S/1E 6F6	6341 Scarlett Ct	11/12/90	Monitor	14.66	4.66-14.66
5b	3S/1E 6F7	6341 Scarlett Ct	07/17/91	Monitor	15	5-15
5c	3S/1E 6F8	6341 Scarlett Ct	07/17/91	Monitor	15	5-15
5d	3S/1E 6F17	6341 Scarlett Ct	07/31/92	Monitor	15	5-15
5e	3S/1E 6F18	6341 Scarlett Ct	07/31/92	Monitor	15	5-15
5f	3S/1E 6F19	6341 Scarlett Ct	07/31/92	Monitor	15	5-15
6	3S/1E 6G10	3960 Houston Place	05/17/90	Monitor	20	6-20
7a	3S/1E 6F10	6393 Scarlett Ct	11/22/91	Monitor	20	5-20
7b	3S/1E 6F11	6393 Scarlett Ct	11/21/91	Monitor	20	5-20
7c	3S/1E 6F12	6393 Scarlett Ct	11/21/91	Monitor	20	5-20
7d	3S/1E 6F13	6393 Scarlett Ct	11/21/91	Monitor	20	5-20
8a	3S/1E 6E2	6401 Dublin Blvd	02/24/94	Monitor	20	4-20
8b	3S/1E 6E3	6401 Dublin Blvd	02/25/94	Monitor	20	4-20
8c	3S/1E 6E4	6401 Dublin Blvd	02/25/94	Monitor	19	4-19
8d	3S/1E 6E10	6401 Dublin Blvd	09/28/01	Monitor	20	5-20
8e	3S/1E 6E11	6401 Dublin Blvd	09/28/01	Monitor	20	5-20

**Table 4**  
**Summary of Wells Identified Within Area of Review**  
**Station #11120, 6400 Dublin Road, Dublin, CA**

Site Map Location	State Well I.D.	Well Location	Date Drilled	Well Type	Total Depth (ft. bgs)	Screened Interval (ft. bgs)
9a	3S/1E 6F5	6301 Scarlett Ct	12/07/88	Monitor	20.5	5.5-20.5
9b	3S/1E 6F9	6301 Scarlett Ct	10/17/91	Test	18	8-18
10	3S/1E 6K1	Chabot Drive near the 80	11/28/84	Monitor	30	15-30
11a	3S/11E-6L1	Empty lot on corner of Owens Dr. &	08/20/86	Monitor	13	6-13
11b	3S/11E-6L2	Empty lot on corner of Owens Dr. &	08/20/86	Monitor	12	6-12
11c	3S/11E-6L3	Empty lot on corner of Owens Dr. &	08/20/86	Monitor	17	8-17
11d	3S/11E-6L4	Empty lot on corner of Owens Dr. &	08/20/86	Monitor	20	5-20
12	3S/1E 6F3	East End of Dublin Court	05/01/76	Monitor	32	27-32
13a	3S/1E 6C11	6310 Houston Place	03/01/91	Monitor	18	8-18
13b	3S/1E 6C12	6310 Houston Place	03/01/91	Monitor	18	8-18
14a	3S/1W 1J1	Near Johnson Dr. 0.1 mile south of 580	11/26/84	Monitor	64	47-64
14b	3S/1W 1J2	Near Johnson Dr. 0.1 mile south of 580	11/28/84	Monitor	37	15-37
15a	3S/1E 6F20	6400 Dublin Blvd	10/13/92	Monitor	19	14-19
15b	3S/1E 6F21	6400 Dublin Blvd	10/13/92	Abandoned	19	13-19
15c	3S/1E 6F22	6400 Dublin Blvd	10/13/92	Abandoned	19	14-19
15d	3S/1E 6F23	6400 Dublin Blvd	10/13/92	Abandoned	19	14-19
15e	3S/1E 6F24	6400 Dublin Blvd	04/06/93	Abandoned	21	16-21
15f	3S/1E 6F25	6400 Dublin Blvd	04/06/93	Abandoned	21	16-21
15g	3S/1E 6F26	6400 Dublin Blvd	04/06/93	Abandoned	22	17-22
16a	3S/1E 6F4	Fernandez St. and 4th Street	05/20/02	Monitor	15	10-15
16b	3S/1E 6F5	Fernandez St. and 4th Street	05/20/02	Monitor	4.5	2.5-14.5
16c	3S/1E 6F6	Fernandez St. and 4th Street	05/20/02	Monitor	4.5	9.5-14.5
16d	3S/1E 6F7	Fernandez St. and 4th Street	05/20/02	Monitor	5.5	10.5-15.5

**Table 4**  
**Summary of Wells Identified Within Area of Review**  
**Station #11120, 6400 Dublin Road, Dublin, CA**

Site Map Location	State Well I.D.	Well Location	Date Drilled	Well Type	Total Depth (ft. bgs)	Screened Interval (ft. bgs)
16e	3S/IE 6F8	Fernandez St and 4th Street	05/20/02	Monitor	14.7	9.7-14.7
16f	3S/IE 6F9	Fernandez St and 4th Street	05/20/02	Monitor	15	10-15
16g	3S/IE 6F10	Fernandez St and 4th Street	05/20/02	Monitor	14.7	9.7-14.7
16h	3S/IE 6F11	Fernandez St and 4th Street	05/20/02	Monitor	14.5	9.5-14.5
16i	3S/IE 6F12	Fernandez St and 4th Street	05/20/02	Monitor	14.5	9.5-14.5
16j	3S/IE 6F13	Fernandez St and 4th Street	05/20/02	Monitor	14.5	9.5-14.5
17	3S/IE 6C9	Southern Pacific Railroad R.O.W.	03/28/90	Cathodic	300	NA
18	3S/IE 6ME	East of ACFC Service road, South of	01/12/82	Test	380	NA
19	3S/IE 6J5	Near the 580 and Chabot Canal	09/28/87	Test	28.5	21-28.5
20a	3S/IE 6D1	6360 Trinity Ct	07/15/91	Test	22	7-22
20b	3S/IE 6D2	6360 Trinity Ct	07/15/91	Test	22	7-22
20c	3S/IE 6D3	6360 Trinity Ct	07/15/91	Test	22	7-22
21a	3S/IE 6C6	Unknown	08/02/89	Monitor	20	10-20
21b	3S/IE 6C7	Unknown	08/02/89	Monitor	18	8-18
21c	3S/IE 6C8	Unknown	08/02/89	Monitor	17	7-17
22	3S/IE 6E4	6457 Dublin Ct	10/19/86	Abandoned	200	76-85
23a	Unknown	6450 Dublin Court	Unknown	Monitor	Unknown	Unknown
23b	Unknown	6450 Dublin Court	Unknown	Monitor	Unknown	Unknown
23c	Unknown	6450 Dublin Court	Unknown	Monitor	Unknown	Unknown
23d	Unknown	6450 Dublin Court	Unknown	Monitor	Unknown	Unknown
23e	Unknown	6450 Dublin Court	Unknown	Monitor	Unknown	Unknown
23f	Unknown	6450 Dublin Court	Unknown	Monitor	Unknown	Unknown
23g	Unknown	6450 Dublin Court	Unknown	Monitor	Unknown	Unknown
23h	Unknown	6450 Dublin Court	Unknown	Monitor	Unknown	Unknown
23i	Unknown	6450 Dublin Court	Unknown	Monitor	Unknown	Unknown
23j	Unknown	6450 Dublin Court	Unknown	Monitor	Unknown	Unknown
	2S/1W 26	1 Mile North of Highway 50, East of	06/22/60	Domestic	570	476-574
	2S/1W 36E1	Volk Mcclain Co	08/03/60	Unknown	388	Unknown
	3S/IE 6G4	Unknown	Unknown	Unknown	192	Unknown

**APPENDIX A**

**HISTORICAL GROUND-WATER ANALYTICAL DATA (1992-1998)  
(SOURCE: ALISTO ENGINEERING)**

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING  
 BP OIL COMPANY SERVICE STATION NO. 11120  
 6100 DUBLIN BOULEVARD, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-170

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (e) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-1	(c) 10/27/92	328.96	8.19	320.77	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—
MW-1	04/09/93	328.96	4.79	324.17	ND<50	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PAGE
MW-1	08/25/93	328.96	6.85	322.11	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PAGE
MW-1	11/22/93	328.96	7.38	321.58	ND<50	ND<50	ND<1.5	ND<0.5	ND<0.5	ND<0.5	—	—	PAGE
MW-1	03/07/94	328.96	5.89	323.07	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PAGE
MW-1	08/09/94	328.96	6.42	322.54	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	4.3	PAGE
MW-1	09/12/94	328.96	7.33	321.63	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	8.8	PAGE
MW-1	12/20/94	328.96	6.34	322.62	—	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	7.0	PAGE
MW-1	02/18/95	328.96	4.37	324.59	ND<50	ND<500	ND<0.50	—	—	—	—	—	—
MW-1	06/29/95	328.96	5.95	323.01	ND<50	—	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	5.6	ATI
MW-1	09/06/95	328.96	6.44	322.52	ND<50	340	ND<1.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	7.4	ATI
MW-1	12/22/95	328.96	6.04	322.92	—	—	—	—	—	—	—	—	—
MW-1	08/21/96	328.96	5.65	323.31	—	—	—	—	—	—	—	—	—
MW-1	10/31/96	328.96	—	—	ND<50	100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.0	SPL
MW-1	(u) 12/02/96	328.96	—	—	—	—	—	—	—	—	—	—	—
MW-1	(d) 06/26/98	328.96	—	—	—	—	—	—	—	—	—	—	—
MW-2	10/27/92	328.50	7.64	320.86	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—
MW-2	04/09/93	328.50	4.12	324.38	ND<50	80	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PAGE
MW-2	08/25/93	328.50	6.31	322.19	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PAGE
MW-2	11/22/93	328.50	7.12	321.38	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PAGE
MW-2	03/07/94	328.50	5.50	322.99	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PAGE
MW-2	06/09/94	328.50	5.91	322.59	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PAGE
MW-2	09/12/94	328.50	6.87	321.63	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	4.3	PAGE
MW-2	12/20/94	328.50	5.86	322.64	ND<50	160	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	8.2	PAGE
MW-2	03/16/95	328.50	3.77	324.73	—	—	—	—	—	—	—	7.5	PAGE
MW-2	08/16/95	328.50	3.77	324.73	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	—	—
MW-2	06/29/95	328.50	4.33	324.17	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	6.6	ATI
MW-2	09/06/95	328.50	3.05	322.65	—	—	—	—	—	—	—	6.6	ATI
MW-2	12/22/95	328.50	5.50	323.00	ND<50	210	ND<0.50	—	—	—	—	—	—
MW-2	08/21/96	328.50	5.07	323.43	—	—	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	7.0	ATI
MW-2	10/31/96	328.50	—	—	ND<50	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	—	—
MW-2	12/02/96	328.50	5.50	323.00	—	—	—	—	—	—	—	—	SPL
MW-2	03/27/97	328.50	4.61	323.89	—	—	—	—	—	—	—	—	—
MW-2	06/09/97	328.50	7.14	321.36	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	—	—
MW-2	09/16/97	328.50	6.10	322.40	—	—	—	—	—	—	—	5.8	SPL
MW-2	12/03/97	328.50	6.22	322.29	ND<50	ND<100	ND<1.5	ND<1.0	ND<1.0	ND<1.0	ND<10	—	—
MW-2	06/26/98	328.50	4.86	323.64	ND<50	—	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.8	SPL



TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING  
 BP OIL COMPANY SERVICE STATION NO. 11120  
 6400 DUBLIN BOULEVARD, DUBLIN, CALIFORNIA

AUSTO PROJECT NO. 10-170

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet) (a)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet) (b)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-3	10/27/92	329.36	8.43	320.93	210	ND<50							
MW-3	04/09/93	329.36	4.90	324.46	260								
MW-3	00/26/93	329.36	7.13	322.23	400	ND<50	3	0.7	0.9	30			PACE
MW-3	11/22/93	329.36	7.60	321.76	2000	449	ND<0.5	ND<0.5	ND<0.5	ND<0.5			PACE
MW-3	03/07/94	329.36	6.00	323.36	1800	380	ND<2.5	ND<2.5	ND<2.5	ND<2.5	3300	(g)	PACE
MW-3	08/09/94	329.36	6.51	322.85	1300	5000	22	4.0	2.2	3.8	910	(a)	PACE
OC-1 (f)	06/09/94	—	—	—	8500	2600	25	8.3	0.5	15	7200	(a)	PACE
MW-3	01/12/94	329.36	7.63	321.73	6900	—	23	6.3	0.5	10	13000	(a)	PACE
OC-1 (f)	09/12/94	—	—	—	2100	2200	ND<5.0	ND<5.0	ND<5.0	ND<5.0	13000	(a)	PACE
MW-3	12/20/94	329.36	—	—	1800	—	—	—	—	—	—	—	PACE
OC-1 (f)	12/20/94	—	6.41	322.95	18000	8600	ND<5.0	ND<5.0	8.0	10	3800	(a)	PACE
MW-3	03/18/95	329.36	—	—	17000	—	79	28	89	4.3	—	—	PACE
OC-1 (f)	03/16/95	—	4.38	324.97	6300	7000	79	33	80	ND<2.5	—	7.3	PACE
MW-3	06/28/95	329.36	—	—	6300	—	470	ND<5.0	—	—	—	—	PACE
OC-1 (f)	06/28/95	—	5.50	323.86	6000	—	500	ND<5.0	210	8.9	—	5.5	ATI
MW-3	09/06/95	329.36	—	—	6000	3000	(g) ND<10	ND<10	230	19	—	—	ATI
OC-1 (f)	09/06/95	—	6.88	322.70	10000	—	(g) ND<10	ND<10	ND<10	ND<20	—	7.4	ATI
MW-3	12/22/95	329.36	—	—	8700	2800	ND<50	ND<50	ND<50	ND<100	—	—	ATI
MW-3	09/20/96	329.36	6.31	323.05	—	—	ND<50	ND<50	ND<50	ND<100	37000	7.1	ATI
MW-3	03/21/96	329.36	5.87	323.49	8200	2500	ND<50	ND<50	ND<50	ND<100	35000	—	ATI
OC-1 (f)	09/21/96	—	—	—	3700	—	—	—	—	—	29000	6.7	ATI
MW-3	11/31/96	329.36	—	—	3500	1800	ND<25	ND<50	—	—	—	—	—
OC-1 (f)	11/31/96	—	6.20	323.16	ND<250	ND<500	ND<25	ND<50	ND<50	ND<50	1100	6.8	SPL
MW-3	12/02/96	329.36	—	—	ND<250	—	ND<25	ND<50	ND<50	ND<50	4000	—	SPL
OC-1 (f)	12/02/96	—	6.27	323.09	ND<250	—	ND<25	ND<50	ND<50	ND<50	ND<50	6.8	SPL
MW-3	03/27/97	329.36	—	—	ND<250	—	ND<25	ND<50	ND<50	ND<50	ND<50	—	—
MW-3	06/03/97	329.36	5.89	323.47	470	—	ND<25	ND<50	ND<50	ND<50	ND<50	6.4	SPL
OC-1 (f)	06/03/97	—	7.92	321.44	ND<250	ND<100	ND<25	ND<50	ND<50	ND<50	ND<50	—	—
MW-3	09/16/97	329.36	—	—	ND<250	160	ND<25	ND<50	ND<50	ND<50	480	5.9	SPL
MW-3	09/16/97	329.36	8.67	322.69	ND<250	—	ND<25	ND<50	ND<50	ND<50	04	6.2	SPL
MW-3	12/03/97	329.36	—	—	ND<50	—	ND<25	ND<50	ND<50	ND<50	74.0	—	SPL
OC-1 (f)	12/03/97	—	6.81	322.55	ND<50	330	ND<25	ND<50	ND<50	ND<50	ND<50	—	—
MW-3	06/26/98	329.36	—	—	ND<50	—	ND<25	ND<50	ND<50	ND<50	ND<50	5.5	SPL
			5.08	324.28	ND<250	—	ND<25	ND<50	ND<50	ND<50	ND<50	5.0	SPL
							ND<25	ND<50	ND<50	ND<50	ND<50	—	SPL
											ND<10	4.8	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING  
 BP OIL COMPANY SERVICE STATION NO. 11120  
 6400 DUBLIN BOULEVARD, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-170

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet) (a)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet) (b)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-4	10/27/82	329.45	8.61	320.84									
MW-4	01/09/93	329.45	5.25	324.20	2300	190	23	54	50	320			
MW-4	08/25/88	329.45	7.32	322.13	1500	500	78						PAGE
OC-1 (f)	08/25/88				1800	380	ND<0.5	3.5	98	1.0			PAGE
MW-4	11/22/93				1600		ND<0.5	ND<0.5	ND<0.5	ND<0.5	2100	(g)	PAGE
OC-1 (f)	11/22/93	329.45	7.83	321.62	610	280	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2100	(g)	PAGE
MW-4	03/07/94	329.45			1700		ND<2.5	ND<2.5	ND<2.5	ND<2.5			PAGE
OC-1 (f)	03/07/94		8.29	323.16	710	1400	0.5				3500	(g)	PAGE
MW-4	06/08/94	329.45	8.75	322.69	1600		ND<0.5	ND<0.5	ND<0.5	ND<0.5	5900	(g)	PAGE
MW-4	09/12/94	329.45	7.93	321.52	6400	1800	ND<0.5	ND<10	1.1	0.8			PAGE
MW-4	12/20/94	329.45	6.88	322.77	2000	2700	ND<0.5	ND<0.5	ND<10	ND<10	10000	(g)	PAGE
MW-4	03/10/95	329.45	4.66	324.79	9200	8400	ND<5.0	ND<5.0	ND<0.5	ND<0.5	3200	(g)	PAGE
MW-4	06/28/95	329.45	5.93	323.52	1400	960		ND<2.5	ND<5.0	ND<5.0			PAGE
MW-4	09/06/95	329.45	6.83	322.62	5000	5400	(g)	240	58	14			ATI
MW-4	12/22/95	329.45	6.42	323.03	4400	4500	ND<13	ND<10	220	ND<10			ATI
OC-1 (f)	12/22/95				3800	4700	15	ND<13	ND<13	ND<25	12000		ATI
MW-4	08/20/96	329.45			3900						9200		ATI
MW-4	08/21/96	329.45	6.01	323.44			16	ND<18	ND<13	ND<25	8500		ATI
MW-4	10/31/96	329.45			ND<250								
MW-4	12/02/96	329.45	6.37	323.08	ND<250	470	ND<12	ND<25	ND<25	ND<25	ND<250		SPL
MW-4	03/27/97	329.45	5.71	322.74	ND<50	1800	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50		SPL
OC-1 (f)	03/27/97		5.70	323.75	8300	15000	ND<5	ND<10	ND<10	ND<10	2500		SPL
MW-4	06/03/97	329.45	8.37	321.08	6900		44	ND<25	ND<25	ND<25	8000		SPL
MW-4	09/16/97	329.45	6.91	322.54	2600	270	51	ND<25	ND<25	ND<25	8500		SPL
OC-1 (f)	09/16/97				110	1600	62	ND<1.0	ND<1.0	ND<1.0	7000		SPL
MW-4	12/03/97	329.45	7.16	322.29	190		12	ND<1.0	ND<1.0	ND<1.0	7700		SPL
MW-4	06/26/98	329.45	5.15	324.30	ND<50	ND<200	ND<0.5	ND<1.0	ND<1.0	1.1	7100		SPL
MW-5	04/03/83	328.60	5.18	324.42	520		0.82	ND<1.0	ND<1.0	ND<1.0	ND<10		SPL
MW-5	08/25/93	328.60	7.28	322.32	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5			
MW-5	11/22/93	328.60	7.82	321.78	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5			PAGE
MW-5	03/07/94	328.60	6.27	323.39	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5			PAGE
MW-5	09/18/94	328.60	6.73	322.87	ND<50	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5			PAGE
MW-5	09/12/94	328.60	7.78	321.82	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5			PAGE
MW-5	12/20/94	328.60	6.53	322.97	ND<50	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5			PAGE
MW-5	03/16/95	328.60	4.65	324.95									PAGE
MW-5	06/28/95	328.60	5.69	323.91	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0			
MW-5	09/06/95	328.60	6.62	322.78									
MW-5	12/22/95	328.60	6.40	323.20	ND<50	200	ND<0.50	ND<0.50	ND<0.50	ND<1.0			ATI
MW-5	08/20/96	328.60	5.88	323.62							ND<5.0		
MW-5	08/21/96	328.60											ATI
MW-5	10/31/96	328.60	6.29	323.31	ND<50	ND<50	ND<0.50	ND<1.0					
MW-5	12/02/96	328.60	6.37	323.23					ND<1.0	ND<1.0	ND<1.0		
MW-5	03/27/97	328.60	5.33	324.27									SPL
MW-5	06/03/97	328.60	6.00	321.80	ND<50	ND<100	ND<0.5	ND<1.0					
MW-5	09/16/97	328.60	6.89	322.71					ND<1.0	ND<1.0	ND<10		SPL
MW-5	12/03/97	328.60	6.99	322.61	ND<50	ND<100	ND<0.5	ND<1.0					
MW-5	06/26/98	328.60	5.11	324.49	ND<50				ND<1.0	ND<1.0	27		SPL
							ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10		SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING  
 BP OIL COMPANY SERVICE STATION NO. 11120  
 5400 DUBLIN BOULEVARD, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-170

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Foot)	DEPTH TO WATER (Foot)	GROUNDWATER ELEVATION (Foot)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-6	04/01/83	329.55	5.97	324.10	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—
MW-6	08/25/83	329.55	7.42	322.13	ND<50	170	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—
MW-6	11/22/83	329.55	7.93	321.62	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—
MW-6	03/07/84	329.55	6.25	323.30	ND<50	90	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—
MW-6	06/09/84	329.55	6.85	322.70	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—
MW-6	09/12/84	329.55	7.91	321.64	ND<50	240	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.2
MW-6	12/20/84	329.55	6.82	322.73	—	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.0
MW-6	03/16/85	329.55	4.78	324.77	—	—	—	—	—	—	—	—	6.7
MW-6	06/28/85	329.55	5.97	323.58	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	—	—
MW-6	09/06/85	329.55	6.94	322.61	—	—	—	—	—	—	—	—	6.1
MW-6	12/20/85	329.55	6.53	323.02	ND<50	840	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	—	ATI
MW-6	08/20/86	329.55	6.18	323.02	—	—	—	—	—	—	ND<5.0	—	7.2
MW-6	08/21/86	329.55	—	323.87	—	—	—	—	—	—	—	—	ATI
MW-6	10/31/86	329.55	—	—	ND<50	—	—	—	—	—	—	—	—
MW-6	12/02/86	329.55	6.52	323.03	—	—	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	—	—
MW-6	03/27/87	329.55	6.55	323.00	—	—	—	—	—	—	—	—	SPL
MW-6	09/03/87	329.55	5.50	324.05	—	—	—	—	—	—	—	—	—
MW-6	09/03/87	329.55	8.19	321.86	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	—	—
MW-6	09/18/87	329.55	6.85	322.80	—	—	—	—	—	—	—	—	—
MW-6	12/03/87	329.55	7.22	322.83	ND<250	680	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<5.0	—	6.3
MW-6	06/26/88	329.55	5.20	324.35	ND<50	—	—	—	—	—	—	—	—
MW-7	04/09/83	329.49	5.36	324.13	ND<50	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	—	—
MW-7	08/25/83	329.49	7.44	322.05	ND<50	150	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—
MW-7	11/22/83	329.49	7.92	321.57	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—
MW-7	03/07/84	329.49	6.20	323.28	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—
MW-7	06/09/84	329.49	6.69	322.80	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—
MW-7	09/12/84	329.49	7.07	321.62	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—
MW-7	12/20/84	329.49	6.77	322.62	ND<50	50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	3.7
MW-7	03/16/85	329.49	4.77	324.72	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	6.8
MW-7	06/28/85	329.49	4.77	324.72	ND<50	ND<500	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	6.9
MW-7	09/06/85	329.49	5.94	323.55	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	—	—
MW-7	12/20/85	329.49	6.90	322.51	ND<50	320	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	—	—
MW-7	08/20/86	329.49	6.65	322.64	ND<50	240	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	—	—
MW-7	08/21/86	329.49	6.22	323.27	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	—	—
MW-7	10/31/86	329.49	—	—	—	—	—	—	—	—	—	—	—
MW-7	12/02/86	329.49	6.56	322.93	ND<50	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	—	—
MW-7	03/27/87	329.49	6.18	323.86	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	—	—
MW-7	09/03/87	329.49	5.08	324.41	ND<50	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	—	—
MW-7	09/18/87	329.49	7.80	321.69	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	—	—
MW-7	12/03/87	329.49	6.50	322.89	850	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	—	—
MW-7	06/26/88	329.49	6.66	322.88	120	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	—	—
MW-7 (h)	06/26/88	329.49	4.96	324.53	ND<50	ND<200	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	—	—

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING  
 BP OIL COMPANY SERVICE STATION NO. 11120  
 6408 DUBLIN BOULEVARD, DUBLIN, CALIFORNIA

AUSTO PROJECT NO. 10-170

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
CC-2 (f)	08/25/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
CC-2 (f)	11/22/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
CC-2 (f)	03/07/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
CC-2 (f)	06/09/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
CC-2 (f)	09/12/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
CC-2 (f)	12/20/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
CC-2 (f)	03/16/95	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
CC-2 (f)	06/28/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	---	PACE
CC-2 (f)	09/06/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	ATI
CC-2 (f)	12/22/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	ATI
					ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	ATI

ABBREVIATIONS:

TPH-G Total petroleum hydrocarbons as gasoline  
 TPH-D Total petroleum hydrocarbons as diesel  
 B Benzene  
 T Toluene  
 E Ethylbenzene  
 X Total xylenes  
 MTBE Methyl tert butyl ether  
 DO Dissolved oxygen  
 ug/l Micrograms per liter  
 ppm Parts per million  
 ND Not detected above reported detection limit  
 --- Not analyzed/applicable/measured  
 PACE Pace, Inc.  
 ATI Analytical Technologies, Inc.  
 SPL Southern Petroleum Laboratories

NOTES:

- (a) Top of casing elevations surveyed to an arbitrary datum.
- (b) Groundwater elevations relative to an arbitrary datum.
- (c) Analysis did not detect total oil and grease and halogenated volatile organic compounds above reported detection limits.
- (d) Well inaccessible.
- (e) A copy of the documentation for this data is included in Appendix C of Alisto report 10-170-05-001.
- (f) Blind duplicate.
- (g) MTBE peak. Refer to documentation for this data in Appendix C of Alisto report 10-170-05-001.
- (h) Analysis did not detect volatile organic compounds above reported detection limits.
- (i) Travel blank.

F01110-170170-S-4,11022