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By Alameda County Environmental Health at 2:31 pm, Jul 31, 2013

## Atlantic Richfield Company

**Shannon Couch**  
Environmental Business Manager

PO Box 1257  
San Ramon, CA 94583  
Phone: (925) 275-3804  
Mobile: (510) 798-8314  
E-Mail: Shannon.Couch1@bp.com

July 9, 2013

Re: Second Quarter 2013 Status Report  
Atlantic Richfield Company Station #2111  
1156 Davis Street, San Leandro, California  
ACEH Case #RO0000494

"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,



Shannon Couch  
Environmental Business Manager

Attachment:



July 9, 2013

Project No. 06-88-615

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

Attn.: Ms. Shannon Couch

Re: Second Quarter 2013 Status Report, Atlantic Richfield Company Station #2111,  
1156 Davis Street, San Leandro, Alameda County, California; ACEH Case #RO0000494


Dear Ms. Couch:

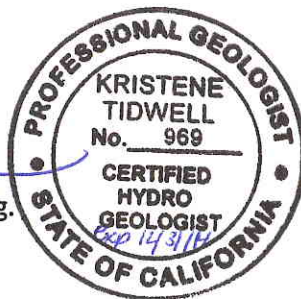
Attached is the *Second Quarter 2013 Status Report* for Atlantic Richfield Company Station #2111 located at 1156 Davis Street, Alameda County, California (Site). This report presents a summary of current developments at the Site through the Second Quarter of 2013. Should you have questions regarding the work performed or results obtained, please do not hesitate to contact us at (707) 455-7290.

Sincerely,  
BROADBENT & ASSOCIATES, INC.



Alexander J. Martinez  
Senior Staff Geologist

  
Kristene Tidwell, P.G., C.Hg.  
Senior Geologist



Enclosures

cc: Ms. Dilan Roe, Alameda County Environmental Health (submitted via ACEH ftp site)  
Mr. Karl Busche, City of San Leandro Environmental Services Division, 835 East 14<sup>th</sup>  
Street, San Leandro, California 945977 (Submitted via Geo Tracker)  
Electronic copy uploaded to GeoTracker

**SECOND QUARTER 2013  
STATUS REPORT  
STATION #2111, SAN LEANDRO, CALIFORNIA**

Broadbent & Associates, Inc. (Broadbent) is pleased to present this *Second Quarter 2013 Status Report* on behalf of Atlantic Richfield Company (ARC, a BP affiliated company) for Station #2111 located in San Leandro, Alameda County, California. Monitoring activities at the Site were performed in accordance with the reporting requirements issued by the Alameda County Environmental Health (ACEH). Details of work performed, discussion of results, and recommendations are provided below.

|                                     |   |
|-------------------------------------|---|
| Facility Name / Address:            | Station #2111 / 1156 Davis Street, San Leandro, California                |
| Client Project Manager / Title:     | Ms. Shannon Couch, Remediation Management Project Manager                 |
| Broadbent Contact:                  | Kristene Tidwell, P.G., C.Hg., (707) 455-7290                             |
| Broadbent Project No.:              | 06-88-615   |
| Primary Regulatory Agency / ID No.: | Alameda County Environmental Health (ACEH)/ Case #RO0000494               |
| Current phase of project:           | Monitoring  |
| List of Acronyms / Abbreviations:   | See end of report text for list of acronyms/abbreviations used in report. |

**WORK PERFORMED THIS QUARTER (Second Quarter 2013):**

1. Submitted *First Quarter 2013 Monitoring Report* on April 30, 2013 (Q1 GWM Report).
2. No environmental field activities were conducted for Second Quarter 2013.
3. Submitted an *Addendum to the Revised Soil & Groundwater Investigation Work Plan* on June 19, 2013.

**WORK SCHEDULED FOR NEXT QUARTER (Third Quarter 2013):**

1. Submit *Second Quarter 2013 Status Report* (contained herein).
2. Conduct Third Quarter 2013 groundwater monitoring and sampling event.
3. Conduct work presented in the Work Plan Addendum submitted June 19, 2013.

**GROUNDWATER MONITORING PLAN SUMMARY:**

|  |                                  |           |
|--|----------------------------------|-----------|
| Groundwater level gauging:                     | MW-1 through MW-8                | (1Q & 3Q) |
| Groundwater sample collection:                 | MW-1 through MW-5, MW-7 and MW-8 | (1Q & 3Q) |
|  | MW-6                             | (3Q)      |
| Biodegradation indicator parameter monitoring: | None                             |           |

**QUARTERLY RESULTS SUMMARY:**

**LNAPL**

|                               |     |          |
|-------------------------------|-----|----------|
| LNAPL observed this quarter:  | N/A | (yes\no) |
| LNAPL recovered this quarter: | N/A | (gal)    |
| Cumulative LNAPL recovered:   | N/A | (gal)    |

**Groundwater Elevation and Gradient:**

|                              |     |                             |
|------------------------------|-----|-----------------------------|
| Depth to groundwater:        | N/A | (ft below TOC)              |
| Gradient direction:          | N/A | (compass direction)         |
| Gradient magnitude:          | N/A | (ft/ft)                     |
| Average change in elevation: | N/A | (ft since last measurement) |

### **Laboratory Analytical Data**

Summary:

No environmental field activities were conducted during Second Quarter 2013.

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### **DISCUSSION:**

No environmental field work was conducted by Broadbent at the Site during the Second Quarter of 2013. The most recent groundwater monitoring/sampling occurred during the First Quarter 2013, the results of which are contained within the Q1 GWM Report. Currently, reevaluation to the scope of a potential offsite investigation is being evaluated in order to expedite activities. Access to one property has as of yet not been obtained, despite repeated efforts. An addendum to *the Revised Soil & Groundwater Investigation Work Plan* was submitted on June 19, 2013. A site location map is presented as Drawing 1 and a groundwater elevation and analytical summary map from the most recent first quarter monitoring and sampling event is provided as Drawing 2.

### **LIMITATIONS:**

The findings presented in this report are based upon observations of field personnel, points investigated, results of laboratory tests performed by TestAmerica Laboratories, Inc. (Irvine, California), and our understanding of ACEH requirements. 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 the Atlantic Richfield Company. It is possible that variations in soil or groundwater 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 Location Map, Station #2111, 1156 Davis Street, San Leandro, California

Drawing 2: Groundwater Elevation Contours and Analytical Summary Map, February 7, 2013, Station #2111, 1156 Davis Street, San Leandro, California

### **LIST OF COMMONLY USED ACRONYMS/ABBREVIATIONS:**

|                    |   |                   |                                |
|--------------------|---|-------------------|--------------------------------|
| ACEH:              | Alameda County Environmental Health           | ft/ft:            | feet per foot                  |
| Broadbent:         | Broadbent & Associates, Inc.                  | gal:              | Gallons                        |
| BTEX:              | Benzene, Toluene, Ethylbenzene, Total Xylenes | GRO:              | Gasoline-Range Organics        |
| 1,2-DCA:           | 1,2-Dichloroethane                            | LNAPL:            | Light Non-Aqueous Phase Liquid |
| DIPE:              | Di-Isopropyl Ether                            | MTBE:             | Methyl Tertiary Butyl Ether    |
| DO:                | Dissolved Oxygen                              | NO <sub>3</sub> : | Nitrate as Nitrogen            |
| DRO:               | Diesel-Range Organics                         | ppb:              | parts per billion              |
| EDB:               | 1,2-Dibromomethane                            | SO <sub>4</sub> : | Sulfate                        |
| Eh:                | Oxidation Reduction Potential                 | TAME:             | Tert-Amyl Methyl Ether         |
| EPA:               | Environmental Protection Agency               | TBA:              | Tertiary Butyl Ether           |
| ETBE:              | Ethyl Tertiary Butyl Ether                    | TOC:              | Top of Casing                  |
| Fe <sup>2+</sup> : | Ferrous Iron                                  | µg/L:             | Micrograms per liter           |

## **DRAWINGS**



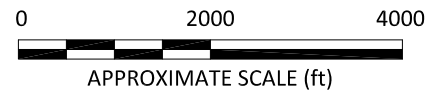
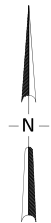
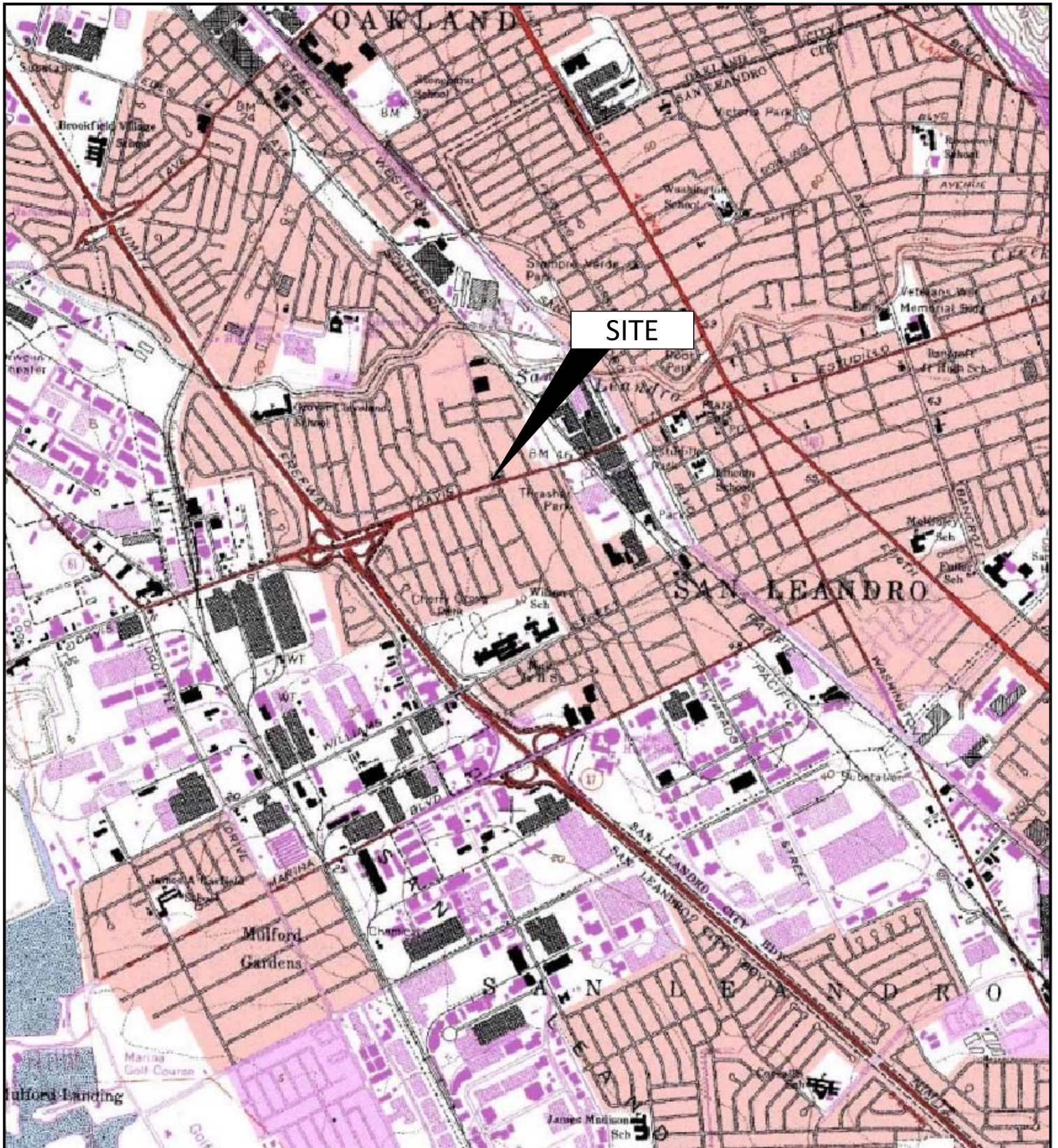


IMAGE SOURCE: USGS



1324 Mangrove Ave., Suite 212  
Chico, California 95926

Project No.: 06-88-615 Date: 3/14/2013

Station #2111  
1156 Davis Street  
San Leandro, California

Site Location Map

Drawing

1

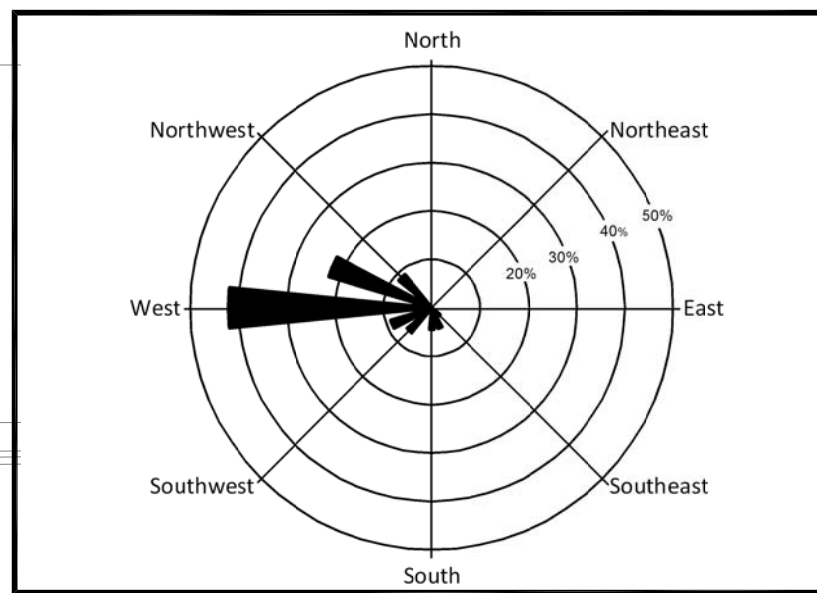
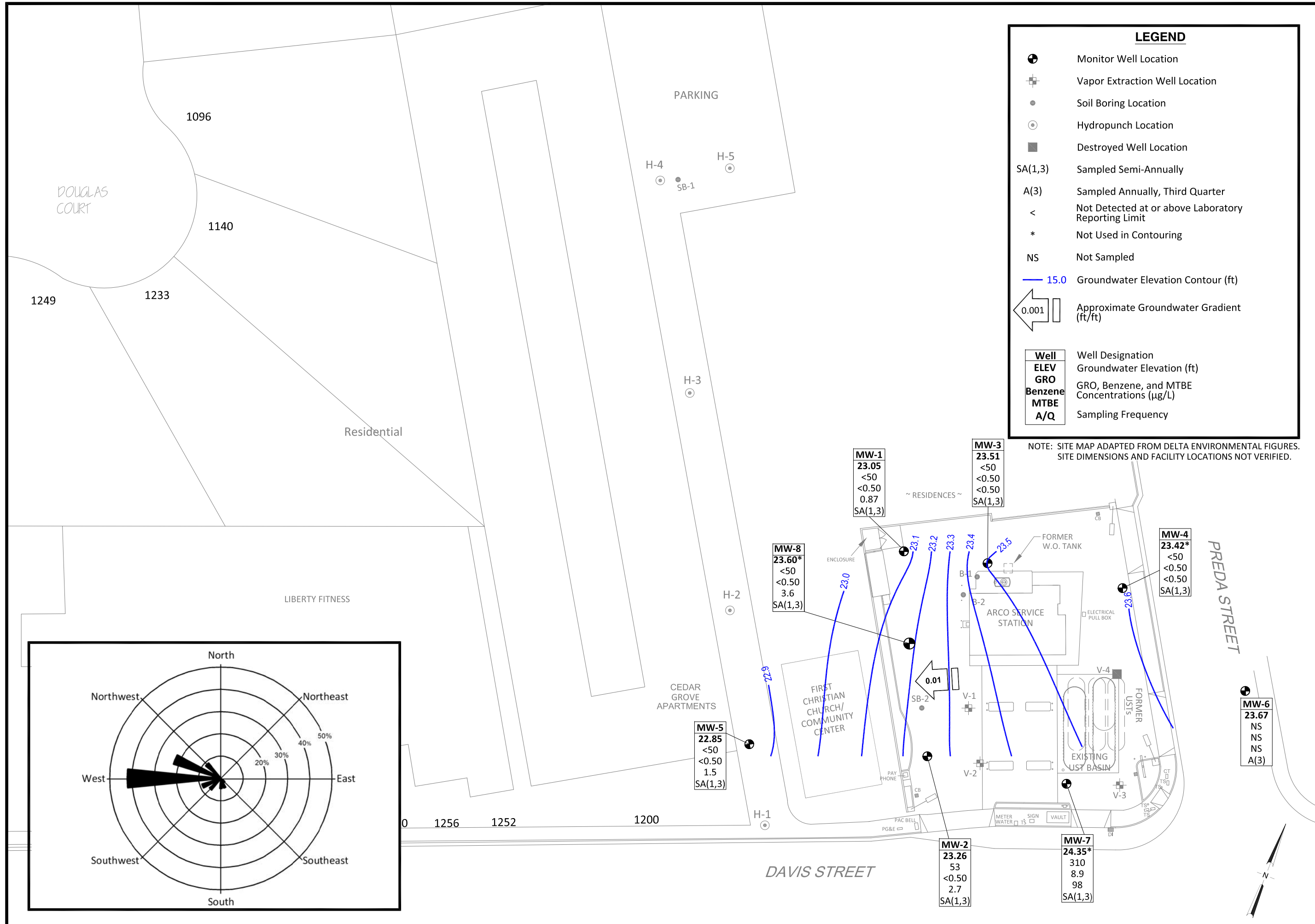


### LEGEND

- Monitor Well Location
- Vapor Extraction Well Location
- Soil Boring Location
- Hydropunch Location
- Destroyed Well Location
- SA(1,3) Sampled Semi-Annually
- A(3) Sampled Annually, Third Quarter
- < Not Detected at or above Laboratory Reporting Limit
- \* Not Used in Contouring
- NS Not Sampled
- 15.0 Groundwater Elevation Contour (ft)
- 0.001 Approximate Groundwater Gradient (ft/ft)

| Well | Well Designation                             |
|------|--|
| ELEV | Groundwater Elevation (ft)                   |
| GRO  | GRO, Benzene, and MTBE Concentrations (µg/L) |
| MTBE |  |
| A/Q  | Sampling Frequency                           |

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



**MW-5**  
22.85  
<50  
<0.50  
1.5  
SA(1,3)

**MW-1**  
23.05  
<50  
<0.50  
0.87  
SA(1,3)

**MW-3**  
23.51  
<50  
<0.50  
<0.50  
SA(1,3)

**MW-8**  
23.60\*  
<50  
<0.50  
3.6  
SA(1,3)

**MW-4**  
23.42\*  
<50  
<0.50  
<0.50  
SA(1,3)

**MW-6**  
23.67  
NS  
NS  
NS  
A(3)

**MW-2**  
23.26  
53  
<0.50  
2.7  
SA(1,3)

**MW-7**  
24.35\*  
310  
8.9  
98  
SA(1,3)