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By Alameda County Environmental Health at 3:03 pm, Jan 27, 2014

Atlantic Richfield Company

Chuck Carmel

Remediation Management Project Manager

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January 24, 2013

Re: Fourth Quarter 2013 Status Report
Former BP Service Station No. 11104
1716 Webster Street
Alameda, California
ACEH Case #RO0000281

"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,



Chuck Carmel

Remediation Management Project Manager

Attachment



BROADBENT

875 Cotting Ln., Suite G, Vacaville, CA 95688

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broadbentinc.com

CREATING SOLUTIONS. BUILDING TRUST.

January 24, 2014

Project No. 06-88-644

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


Attn.: Mr. Chuck Carmel

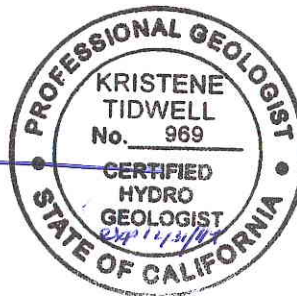
Re: Fourth Quarter 2013 Status Report, Former ARCO Service Station No. 11104, 1716
Webster Street, Alameda, Alameda County, California; ACEH Case #RO0000281

Dear Mr. Carmel:

Attached is the *Fourth Quarter 2013 Status Report* for former ARCO Service Station No. 11104, located at 1716 Webster Street, Alameda, Alameda County, California (Site). This report presents a summary of current developments at the Site through the Fourth 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.


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



Enclosures

cc: Mr. Mark Detterman, Alameda County Environmental Health (submitted via ACEH ftp site)
Mr. Delong Liu, United Petroleum
Electronic copy uploaded to GeoTracker

**FOURTH QUARTER 2013
STATUS REPORT
FORMER ARCO STATION No. 11104, ALAMEDA, CALIFORNIA**

Broadbent & Associates, Inc. (Broadbent) is pleased to present this *Fourth Quarter 2013 Status Report* on behalf of Atlantic Richfield Company (ARC, a BP affiliated company) for former ARCO Station No. 11104 located in Alameda, 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 No. 11104 / 1716 Webster Street, Alameda, California
Client Project Manager / Title:	Mr. Chuck Carmel, Remediation Management Project Manager
Broadbent Contact:	Kristene Tidwell, P.G., C.Hg., (707) 455-7290
Broadbent Project No.:	06-88-644
Primary Regulatory Agency / ID No.:	ACEH / Case #RO0000281
Current phase of project:	Closure Review
List of Acronyms / Abbreviations:	See end of report text for list of acronyms/abbreviations used in report.

WORK PERFORMED THIS QUARTER (Fourth Quarter 2013):

1. Submitted *Third Quarter 2013 Monitoring Report* on October 29, 2013 (Q3 GWM Report).
2. Submitted a letter entitled *Additional Site Sampling Activities dated November 29, 2013*.
3. Measure LNAPL in Site well RW-1, as described in the above-referenced letter.

WORK SCHEDULED FOR NEXT QUARTER (First Quarter 2014):

1. Submit *Fourth Quarter 2013 Status Report* (contained herein).
2. No other work is scheduled to occur at the Site.

GROUNDWATER MONITORING PLAN SUMMARY:

Groundwater level gauging:	Suspended pending Site Closure Review	(1Q & 3Q)
Groundwater sample collection:	Suspended pending Site Closure Review	(1Q) (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 routine groundwater monitoring activities were conducted for Fourth Quarter 2013.	
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DISCUSSION:

The most recent groundwater monitoring and sampling event occurred during the Third Quarter of 2013, the results of which are contained within the Q3 GWM Report. No environmental field activities were conducted by Broadbent & Associates at the Site during the Fourth Quarter of 2013, with the exception of the October 31, 2013 field visit where LNAPL was measured in well RW-1. These activities were documented in Broadbent's *Additional Sampling Activities* letter submitted to the ACEH on November 29, 2013.

Currently, this case is being reviewed by the ACEH for Closure. Groundwater monitoring and sampling has therefore been suspended pending the Closure review. The schedule for future environmental activities will be dependent on the results of the ACEH's Closure evaluation and determination.

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 #11104, 1716 Webster Street, Alameda, California

Drawing 2: Groundwater Elevation Contours and Analytical Summary Map, August 8, 2013, Station #11104, 1716 Webster Street, Alameda, 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 ₃ :	Nitrate as Nitrogen
DRO:	Diesel-Range Organics	ppb:	parts per billion
EDB:	1,2-Dibromomethane	SO ₄ :	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 ²⁺ :	Ferrous Iron	µg/L:	micrograms per liter

DRAWINGS

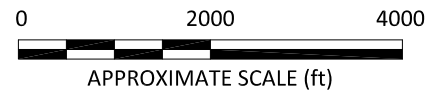
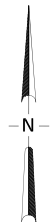
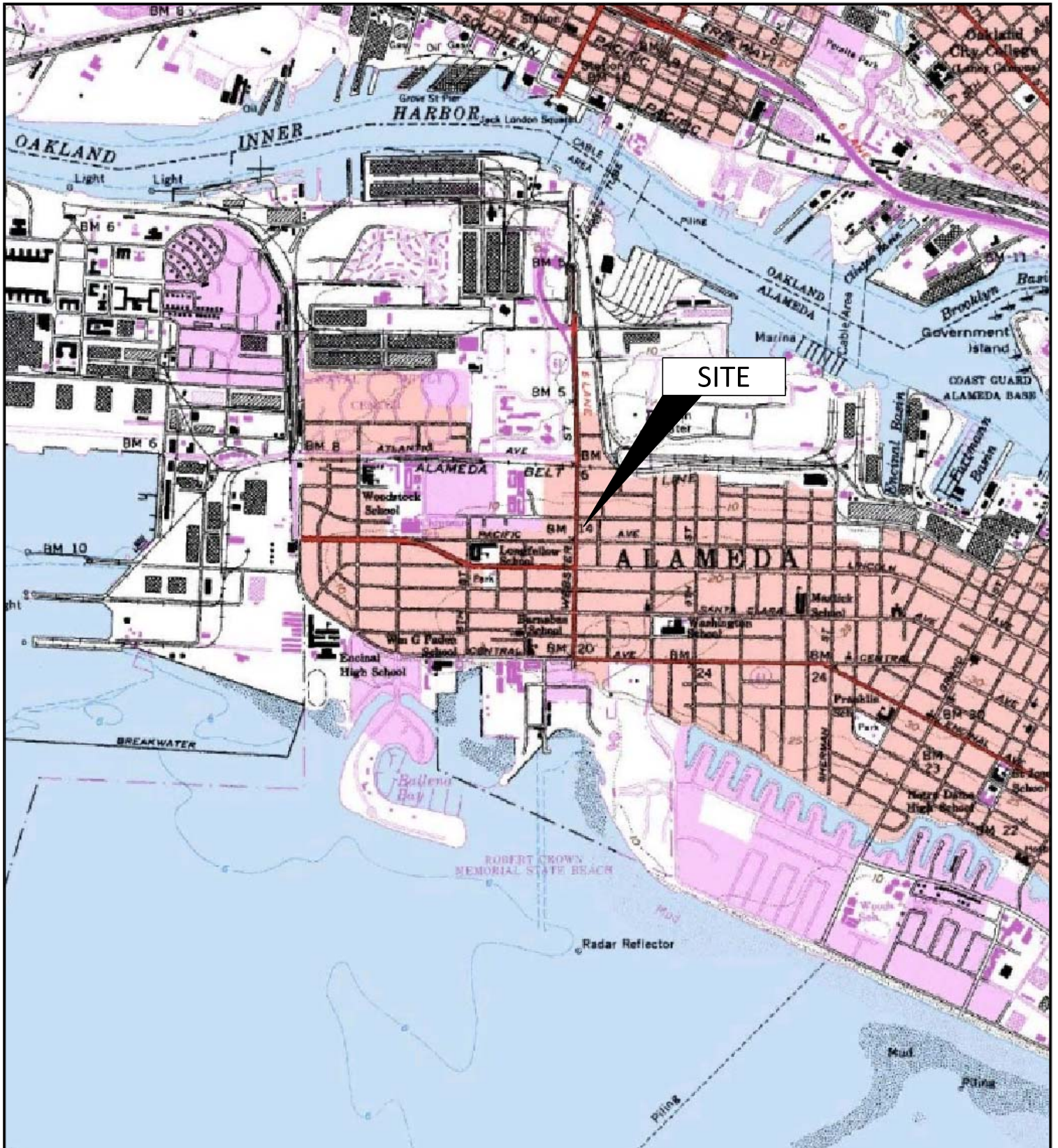


IMAGE SOURCE: USGS



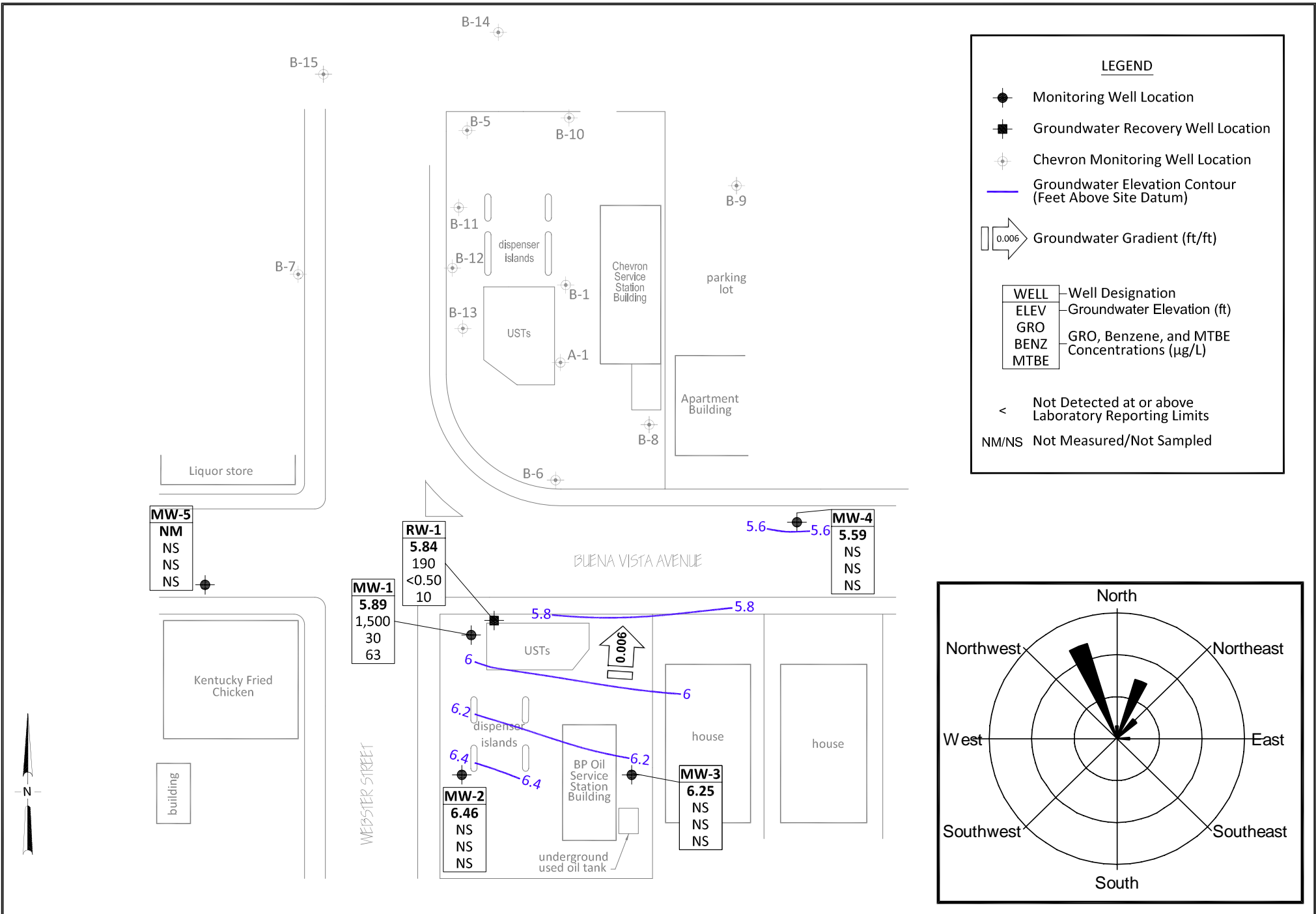
Project No.: 06-88-644 Date: 3/22/2013

Station #11104
1716 Webster Street
Alameda, California

Site Location Map

Drawing

1

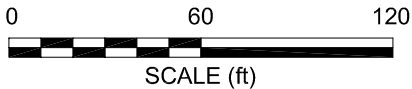
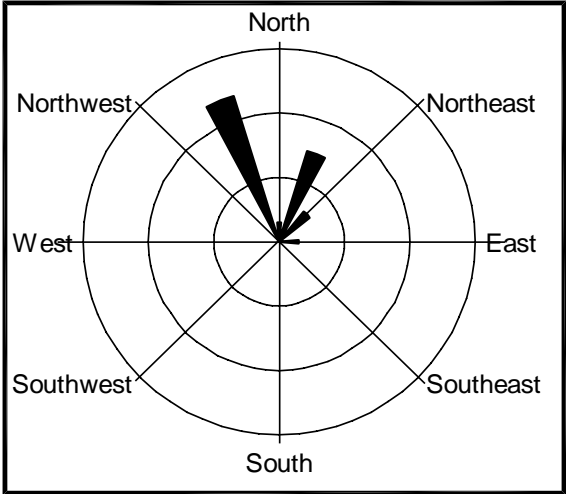


LEGEND

- Monitoring Well Location
- Groundwater Recovery Well Location
- Chevron Monitoring Well Location
- Groundwater Elevation Contour (Feet Above Site Datum)
- Groundwater Gradient (ft/ft)

WELL	Well Designation
ELEV	Groundwater Elevation (ft)
GRO	GRO, Benzene, and MTBE
BENZ	Concentrations (µg/L)
MTBE	

< Not Detected at or above Laboratory Reporting Limits
 NM/NS Not Measured/Not Sampled



BROADBENT
 875 Cotting Lane, Suite G
 Vacaville, California 95688
 Project No.: 06-88-644 Date: 9/6/2013

Station #11104
 1716 Webster Street
 Alameda, California

Groundwater Elevation Contour and
 Analytical Summary Map
 August 8, 2013

Drawing
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