

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

RECEIVED

8:08 am, Feb 02, 2012

Alameda County
Environmental Health

January 31, 2012

Re: Fourth Quarter 2011 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:

January 31, 2012

Project No. 06-88-615

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

Attn.: Ms. Shannon Couch

Re: Fourth Quarter 2011 Status Report, Atlantic Richfield Company Station #2111,
1156 Davis Street, San Leandro, Alameda County, California; ACEH Case #RO0000494

Dear Ms. Couch:

Attached is the *Fourth Quarter 2011 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 Fourth Quarter of 2011. 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.



James Ramos, E.I.T. For
Staff Engineer



Thomas A. Sparrowe, P.G.
Senior Geologist



Enclosures

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

**FOURTH QUARTER 2011
STATUS REPORT
STATION #2111, SAN LEANDRO, CALIFORNIA**

Broadbent & Associates, Inc. (Broadbent) is pleased to present this *Fourth Quarter 2011 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:	<u>Station #2111 / 1156 Davis Street, San Leandro, California</u>
Client Project Manager / Title:	<u>Ms. Shannon Couch, Remediation Management Project Manager</u>
Broadbent Contact:	<u>Tom Sparrowe, P.G., (707) 455-7290</u>
Broadbent Project No.:	<u>06-88-615</u>
Primary Regulatory Agency / ID No.:	<u>Alameda County Environmental Health (ACEH)/ Case #RO0000494</u>
Current phase of project:	<u>Monitoring</u>
List of Acronyms / Abbreviations:	<u>See end of report text for list of acronyms/abbreviations used in report.</u>

WORK PERFORMED THIS QUARTER (Fourth Quarter 2011):

1. Submitted *Third Quarter 2011 Monitoring Report* on October 31, 2011.
2. No environmental field activities were conducted for Fourth Quarter 2011.

WORK SCHEDULED FOR NEXT QUARTER (First Quarter 2012):

1. Submit *Fourth Quarter 2011 Status Report* (contained herein).
2. Conduct First Quarter 2012 groundwater monitoring/sampling activities.

GROUNDWATER MONITORING PLAN SUMMARY:

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

QUARTERLY RESULTS SUMMARY:

LNAPL

LNAPL observed this quarter:	<u>N/A</u>	(yes/no)
LNAPL recovered this quarter:	<u>N/A</u>	(gal)
Cumulative LNAPL recovered:	<u>N/A</u>	(gal)

Groundwater Elevation and Gradient:

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

Laboratory Analytical Data

Summary:	<u>No environmental field activities were conducted during Fourth Quarter 2011.</u>
----------	---

DISCUSSION:

No environmental field work was conducted by Broadbent at the Site during the Fourth Quarter of 2011. The most recent groundwater monitoring/sampling occurred during the Third Quarter of 2011, the results of which are contained within the *Third Quarter 2011 Monitoring Report* (Broadbent, 10/31/11). As to date, ARC and Broadbent are awaiting further correspondence from ACEH or access from the offsite property owner to proceed with an offsite investigation to determine if the petroleum hydrocarbons in the groundwater plume present an exposure hazard to down gradient receptors. For immediate reference, a site location map is provided as Drawing 1 and a groundwater elevation and analytical summary map, dated August 30, 2011, 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 Calscience Environmental Laboratories, Inc. (Garden Grove, 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, August 30, 2011, Station #2111, 1156 Davis Street, San Leandro, California

LIST OF COMMONLY USED ACCRONYMS/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

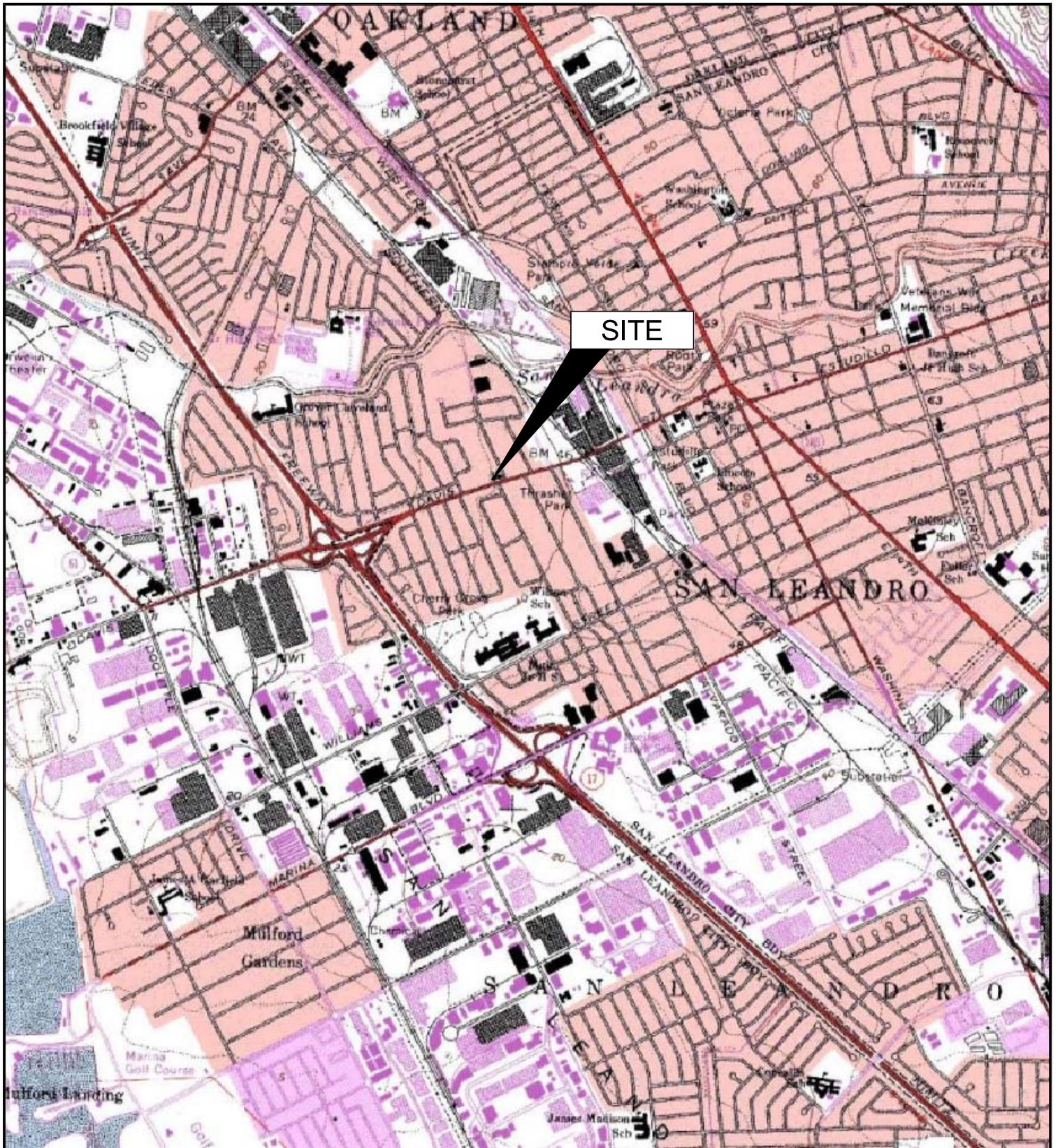


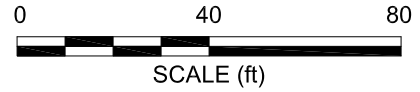
IMAGE SOURCE: USGS

PARKING

H-4

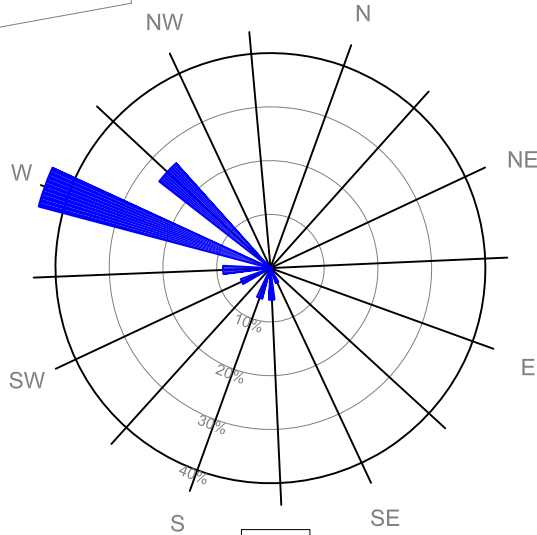
H-5

SB-1



LEGEND

- ⊕ MONITORING WELL LOCATION
- ⊙ VAPOR EXTRACTION WELL LOCATION
- DESTROYED WELL LOCATION
- Well WELL DESIGNATION
- ELEV GROUND-WATER ELEVATION (FT)
- GRO CONCENTRATIONS OF GRO, BENZENE & MTBE IN MICROGRAMS PER LITER (µg/L)
- MTBE
- A/Q SAMPLING FREQUENCY
- ← 0.01 GROUND-WATER FLOW DIRECTION AND GRADIENT (FT/FT)
- 23.8 GROUND-WATER ELEVATION CONTOUR (FT)
- SA(1,3) SAMPLED SEMI-ANNUALLY
- A(3) SAMPLED ANNUALLY, THIRD QUARTER
- < NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMIT
- NS NOT SAMPLED
- NM NOT MEASURED
- * WELL NOT USED TO GENERATE CONTOURS



MW-1
22.36
<50
<0.50
2.1
SA(1,3)

MW-3
22.74
<50
<0.50
<0.50
SA(1,3)

MW-4
22.61
<50
<0.50
<0.50
SA(1,3)

MW-8
22.83
<50
<0.50
3.6
SA(1,3)

MW-5
22.13
<50
<0.50
1.9
SA(1,3)

MW-6
24.01
<0.50
<0.50
<0.50
A(3)

MW-2
22.51
200
<0.50
4.5
SA(1,3)

MW-7
23.44
480
<25
180
SA(1,3)

