

# Atlantic Richfield Company

**Shannon Couch**  
Operations Project Manager

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**RECEIVED**

**8:01 am, Feb 02, 2012**

Alameda County  
Environmental Health

January 31, 2012

Re: Fourth Quarter 2011 Status Report  
Atlantic Richfield Company Service Station #601  
712 Lewelling Boulevard, San Leandro, California  
ACEH Case #RO0000309

"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  
Operations Project Manager

Attachment



A BP affiliated company

January 31, 2012

Project No. 06-88-605

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 #601,  
712 Lewelling Boulevard, San Leandro, Alameda County, California;  
ACEH Case #RO0000309

Dear Ms. Couch:

Attached is the *Fourth Quarter 2011 Status Report* for Atlantic Richfield Company Station #601 located at 712 Lewelling Boulevard, San Leandro, 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 C. 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 (Submitted via GeoTracker)  
Electronic copy uploaded to GeoTracker



**BROADBENT**

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broadbentinc.com

**CREATING SOLUTIONS. BUILDING TRUST.**

January 31, 2012

Project No. 06-88-605

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 #601,  
712 Lewelling Boulevard, San Leandro, Alameda County, California;  
ACEH Case #RO0000309

Dear Ms. Couch:

Attached is the *Fourth Quarter 2011 Status Report* for Atlantic Richfield Company Station #601 located at 712 Lewelling Boulevard, San Leandro, 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.

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BROADBENT & ASSOCIATES, INC.

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cc: Mr. Paresh Khatri, Alameda County Environmental Health (submitted via ACEH ftp site)  
Mr. Karl Busche, City of San Leandro (Submitted via GeoTracker)  
Electronic copy uploaded to GeoTracker

**FOURTH QUARTER 2011  
STATUS REPORT  
STATION #601, SAN LEANDRO, CALIFORNIA**

Broadbent & Associates, Inc. (Broadbent) is pleased to present this *Fourth Quarter 2011 Status Report* on behalf of Atlantic Richfield Company (a BP affiliated company) for Station #601 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 #601 / 712 Lewelling Boulevard, San Leandro, California
Client Project Manager / Title:	Ms. Shannon Couch, Remediation Management Project Manager
Broadbent Contact:	Tom Sparrowe, P.G., (707) 455-7290
Broadbent Project No.:	06-88-605
Primary Regulatory Agency / ID No.:	Alameda County Environmental Health (ACEH)/ Case #RO0000309
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 (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 and sampling.

**GROUNDWATER MONITORING PLAN SUMMARY:**

Groundwater level gauging:	MW-1 through MW-3, and MW-8 through MW-19	(1Q & 3Q)
Groundwater sample collection:	MW-1, MW-3, MW-10, MW-16, MW-17, and MW-18 MW-2, MW-8, MW-9, MW-14, MW-15, and MW-19	(1Q & 3Q) (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 Fourth Quarter 2011.
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## DISCUSSION:

No environmental field activities were conducted by Broadbent & Associates 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). For immediate reference, a site location map is provided as Drawing 1 and a groundwater elevation and analytical summary map, dated August 25, 2011, is provided as Drawing 4.

## 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

Drawing 2: Groundwater Elevation Contours and Analytical Summary Map, August 25, 2011

## 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 <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**



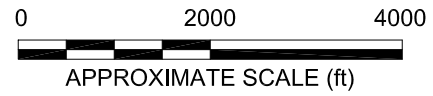
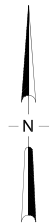
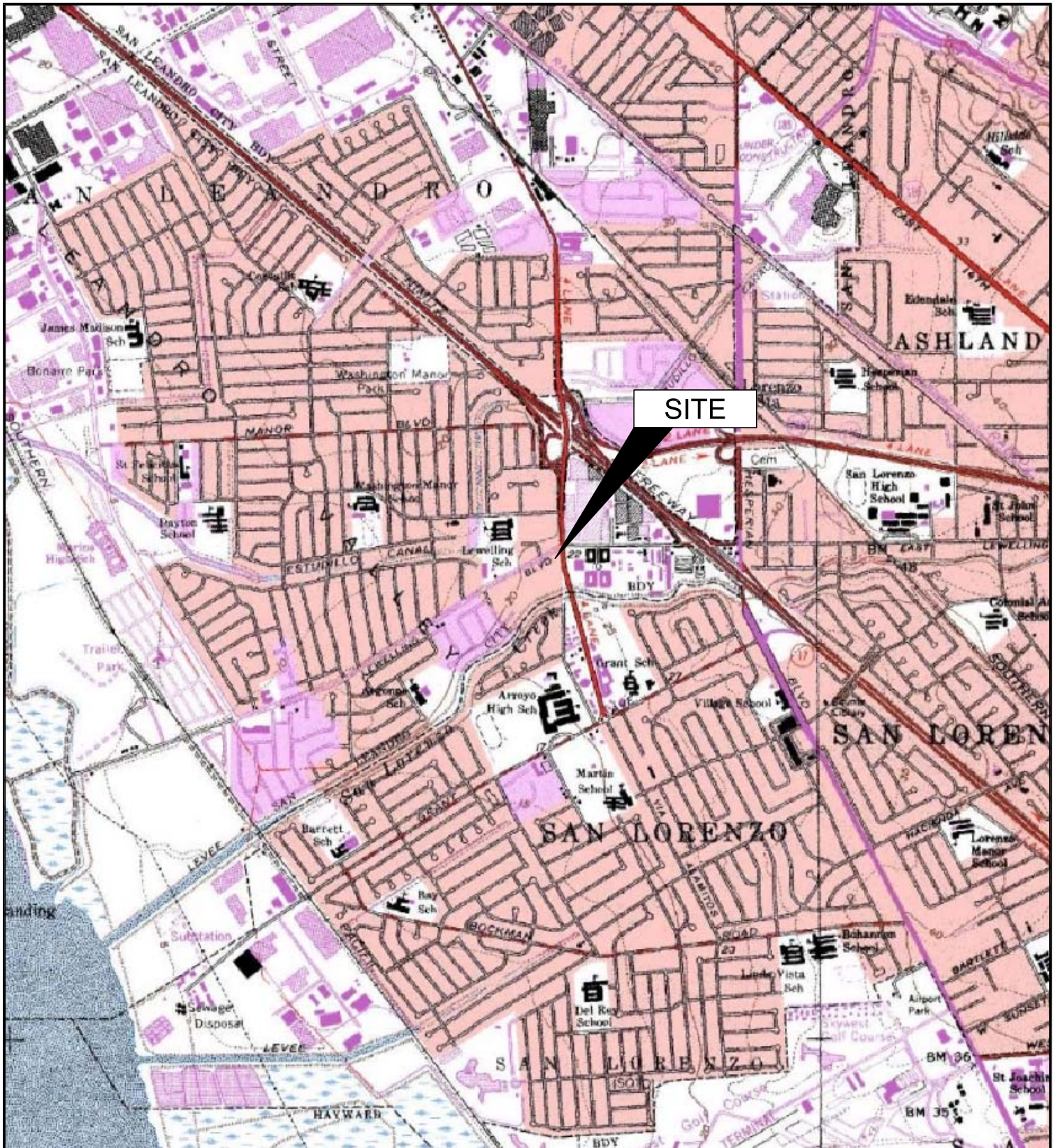
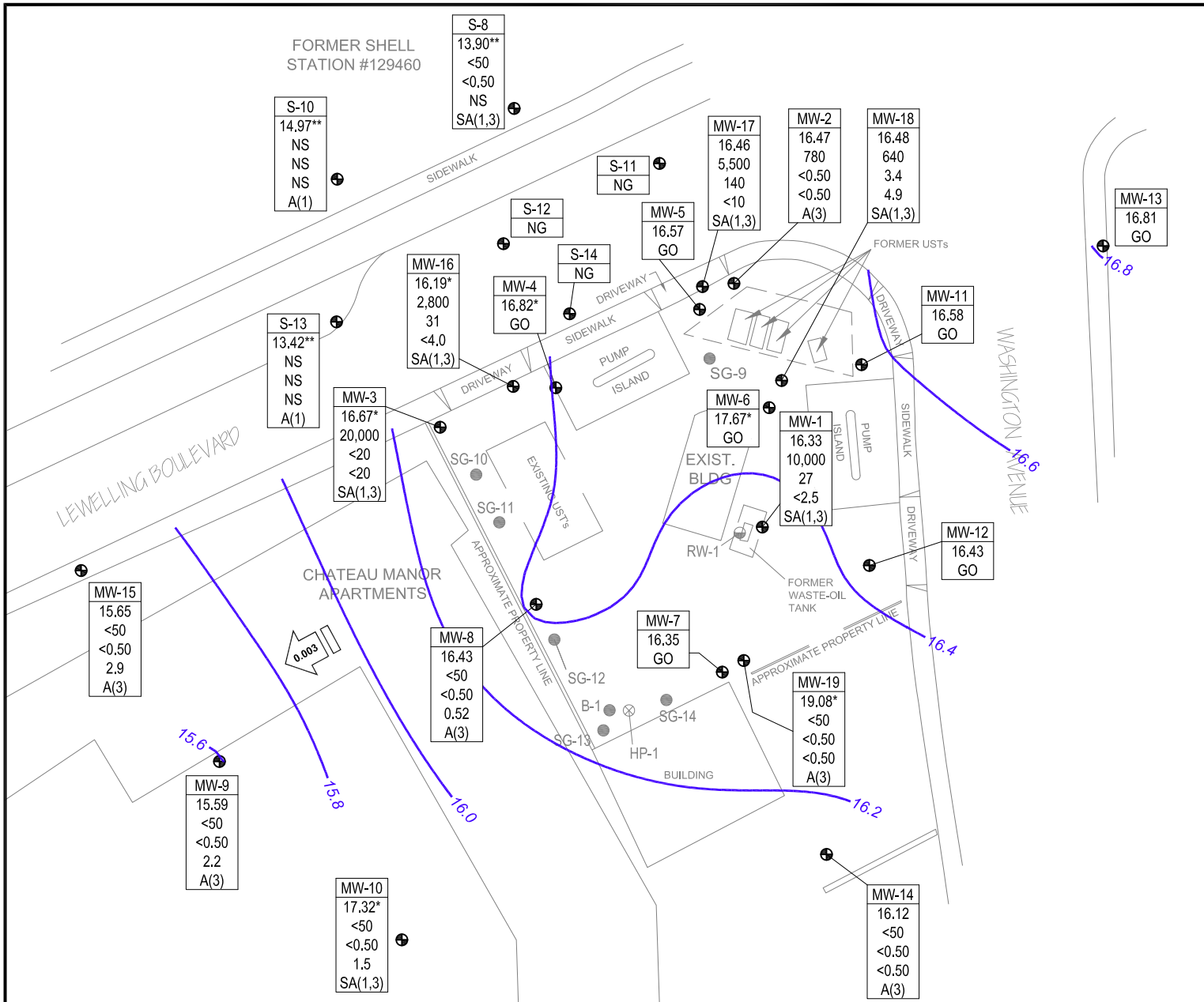


IMAGE SOURCE: USGS

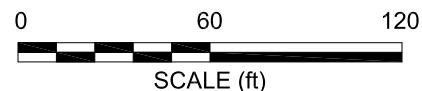




### LEGEND

- ⊕ Monitor Well Location
- Soil-Gas Boring/Temporary Vapor Implant Location
- ⊖ Soil Vapor Extraction Well Location
- ⊗ Hydropunch Location
- ⊙ Grab-Groundwater Sample Location
- Groundwater Elevation Contour (Feet Above Site Datum)
- 0.003 Groundwater Flow Direction and Gradient (ft/ft)
- \* Elevation Not Used in Contouring
- \*\* Shell Wells Not Used in Contouring Monitored 8/25 & 8/26/2011

WELL	Well Designation
ELEV	Groundwater Elevation (ft)
GRO	GRO, Benzene, and MTBE Concentrations (µg/L)
BZ	
MTBE	
A/SA	Sampling Frequency
A(1)	Sampled Annually, 1st Quarter
A(3)	Sampled Annually, 3rd Quarter
SA(1,3)	Sampled Semi-Annually, 1st and 3rd Quarter
GO/NG	Gauge Only/Not Gauged
NM/NS	Not Monitored/Not Sampled



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